THE CHUMASH INDIANS

BY GALE EWELL

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As of 12-31-93

Earl Ford McNaughton

Pictographs of Painted Cave, near San Marcos Pass, in the Santa Ynez Mountains

J-828

Chumash Indians

A Story of Adventure for Young People

BY

GALE EWELL

ILLUSTRATED BY

CAMPBELL GRANT AND CHANNING PEAKE

"Westward the star of empire takes its way;
The first four acts already past,
A fifth shall close the drama with the day:
Time's noblest offspring in the last."

—*Berkeley.*

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FOREWORD

Doctor A. L. Kroeber of the University of California, in "A Mission Record of the California Indians," published in 1908, states: "With Santa Barbara the territory of the Chumash is entered. The Missions of Santa Ynez and San Luis Obispo, as well as those of San Buenaventura and Purisima, were also in Chumash territory and recruited chiefly from the Chumash Indians of the mainland and the northern Santa Barbara Islands."

Professor David B. Rogers of the Santa Barbara Museum of Natural History has recently written a monograph of the prehistoric remains of a now extinct people once located in the vicinity of Santa Barbara. He uses the Spanish cognomen for the race, "Canaliño"—People of the Channel—and states that the name "Chumash" is at best only a corruption of the name of an isolated group of islanders "M' chumash."

Correct information concerning the Chumash Indians is not easily found. I therefore wish to express my indebtedness to Professor Rogers for many interesting facts concerning the customs and artifacts of his "Canaliño."

GALE EWELL.

Another view of pictographs of Painted Cave, near San Marcos Pass, in the Santa Ynez Mountains

Chumash Indians

CHAPTER I

Lloyd Hartnell sat on a cliff, looking out across the Pacific Ocean, his long legs dangling over the perpendicular drop to the beach below. In spite of the sturdy strength of his five feet eleven inches and the mental strength of his facial expression, he was awkwardly, laboriously modeling with kindergarten clay—some plastic red stuff held out for his acceptance by little Anita Joyce as he had passed her home.

Gradually he fashioned the clay into a shape which no animal has yet adopted. It had horns and a hump, long legs and webbed feet, and a tail like that of a chicken. When he felt that nothing more could be done toward making it an object of beauty, he held it up and grinned at it appreciatively.

"If I could increase your size about fifty

times," he thought, "and then bring you to life, we might awaken this town. 'A charming retreat,' as I understand, for poets and painters—but no place for adventure!"

A few moments later he felt the ground slightly tremble beneath him. He laughed at himself for imagining such a thing. But Santa Barbara was getting ready to give this would-be adventurer all the excitement he could desire, for the date was June the twenty-eighth, nineteen and twenty-five.

He watched the surf coming in. "Not very strong," he thought, "not surf you feel like fighting. This shore is protected by those islands." And he looked out across the sea twenty or thirty miles away to the nearest of the Channel Islands. Four of them could be seen: Anacapa, the farthest east, then Santa Cruz, Santa Rosa, and San Miguel to the west. Islands of volcanic origin, produced by upheavals, ages ago. Now they are gradually being wind-swept and washed back into the sea. Gray and mysterious on the blue-tinged water, they lured with mist-laden magic; but Lloyd felt chained. "There is about as much

chance of my visiting them," he determined, "as of their coming over here."

Lloyd's love of adventure was hereditary. He could remember his Swedish father, his exploring, restless spirit. A teacher of science in a New York college, the week-ends found him tramping, boating, studying animal or bird life or marine life along the beaches. Usually Lloyd and his mother would accompany him. No excursions could have been more interesting or joyous. Often, while his father would be observing or studying some problem too detailed for him and his mother, they would race along the beach playing with their dog, his mother's black hair exposed to the wind, her cheeks red from exertion and excitement, and her black eyes snapping because of the freedom of their fun.

Then a change came, sudden and harrowing: Lloyd's father was killed in a railway accident. There followed a period of numbed indecision on his mother's part, of anxiety and aching need of old dependence and love, only to end in a determination that Lloyd should have every opportunity she could give him to develop his naturally

alert and keen powers of observation. She accepted a position in one of the grade schools, but set apart Saturdays as formerly for their nature-study quests. Then, as her father and mother were also living in New York, she gave up the apartment they had been renting and she and Lloyd made their home with them.

After a few years Mrs. Hartnell no longer accompanied Lloyd on his nature-study excursions, but allowed him to go with older boys while she spent the day working toward a master's degree. His hiking trips after this were much more strenuous than they had been, but these experiences seemed merely to harden him to discomfort and exposure, and no physical harm resulted. His summer vacations were spent at some boys' camp, usually one in Maine, and each winter he took swimming and gymnasium lessons. He wanted to prepare himself for a rough, out-of-door life, and he looked forward to it.

Lloyd especially enjoyed swimming, and he became so expert that when he was fourteen a swimming instructor offered him a position as assistant to teach some of his younger boys. From

this time on his afternoons, after school, were busy, but he kept his Saturdays free. And from this time on, too, his summer camping trips were not an expense, for as an assistant swimming instructor he was paid for his work. This life of partial self-dependence and responsibility caused him to mature early; not giving him an old look, but adding strength of expression to features already well formed.

Lloyd's eyes were like those of his father—dark blue, clear, and a little piercing; but his hair was black like that of his mother, who was of Irish descent. His face was strong, and already keen-sighted concentration was suggested along the line of his rather straight eyebrows, but his mouth was optimistic and pleasant and quick to reveal interest or pleasure or mirth.

He continued to attend high school and to teach swimming until he was seventeen years of age, when his mother's health broke and they decided to move to Santa Barbara, California. Mrs. Hartnell had just one great regret in making the change—that she was leaving her father and mother, but they promised that as soon as

they could they would sell their home in New York and join her in Santa Barbara.

Lloyd and his mother arrived in Santa Barbara the last of April. At first they visited an old school friend of Mrs. Hartnell's; then they bought a home, sent for their furniture, and settled down. When the work of moving in was over Lloyd had wanted to get some work which would last him through the summer months, but his mother had begged him not to do so, and he had quickly granted her request, thinking that perhaps having him with her for a while would make her more reconciled to idling herself, and by fall, when he should enter college, she would be better acquainted with the town, have made more friends, and have found interests that would keep her more or less occupied without overtaxing her strength. But this morning out on the beach he was beginning to realize how hard this enforced idleness was going to be.

Then Jacquelin Dean passed, running along the beach with her dog and throwing sticks in the surf for him to retrieve. Jack, as she was called, was a neighbor of Lloyd's. She was at-

tractive, with short golden brown hair—wavy hair—which curled prettily about her face after she had been in swimming. Her features were regular and she had dark lashes and light brown eyes, eyes which in her more serious moments were thoughtful and quiet and a revelation of more depth of character than she was willing to admit, since that was not her pose. But her mouth was her most striking feature, one made for merriment with dimples to accentuate the genuineness of her laughter.

Lloyd was seventeen and Jack was sixteen, and they had a great deal in common. Jack was an apt student, and she expected to enter the freshman year of the Santa Barbara College when the fall term should begin. Lloyd, though he had missed two months of school by moving from New York before the close of the term, had kept up his studies and expected in the fall to be a classmate of Jack's. This they had in common and much else. For one thing they both enjoyed an early morning dip in the ocean and a brisk walk afterwards, and many plans for the future were made on the beach.

But this morning Lloyd did not join Jack; they had had their swim together before breakfast and Lloyd felt that he was too thoroughly monopolizing her time, that she would tire of him. However, apropos only of the fact that he felt starved for excitement, he called out to her, "I understand they have just one storm a year here, a timid one, and when it is over at least half of the population go to sanitariums to recuperate."

She called back to him as she danced away, "Don't be frightened; they never come in summer."

Lloyd thought to himself, "I'll get her next time, but she has good taste, anyway: she'd rather be with that dog than anybody else." But Lloyd need not have felt that Jack would tire of him. To Jack, Lloyd had opened up an entirely new world of enthusiasms. She had always been popular, but no boy had ever brought her half as much as Lloyd had. Their friendship had developed quickly. Jack had studied physics and chemistry in high school, and now she determined to work toward a B.S. degree, as Lloyd

was doing, and they planned when through college to make interesting use of their knowledge. In fact, they both looked forward to a life together of exploration and adventure.

But this dream of the future did not cause them to gaze and thrill without effort to make it a realization. They were soon giving time and thought and bending their energies toward making themselves mentally and physically fit for the arduous experiences to which they looked forward. They even made twelve-mile round-trip hikes to La Cumbre Peak, to a ridge beyond Montecito Peak, and up Sycamore Canyon. Père Long, who also lived near Lloyd, usually accompanied them, and half the fun of their trips was having him with them.

"Père Long" he was called, because two small nieces from France had so styled him—and the name had stuck. For thirty-five years he had been in educational work. Now he was resting and writing and enjoying his well-deserved freedom. A trace of the educator could be noted in his conversation, but he was intensely interesting to both young and old. Lloyd felt that he was

"They took hikes together to La Cumbre Peak"

one of the finest men he had ever met, and his admiration was not misplaced.

Père Long was of medium height, stockily built and energetic, and he had a broad head, gray hair, fairly regular features, and clever, humorous eyes—eyes which seemed to remain merry even when his mind was centered on some abstruse problem, a reflection of his attitude toward life, his assurance that he was living in a decently ordered, progressive world, one not lacking in beauty and humor.

So often up fairly steep and rough trails Père Long and Lloyd and Jack sweated and toiled, ignoring the blazing sun, burnt skin, and blistered feet; even Jack did not complain, for she had determined that she would not be a "piker" now or she might be a "piker" later, on the *real* trail, when hiking would have a distinct and worthwhile object in view.

Once they had a particularly hard hike because they tried to cross-cut down a mountain side instead of remaining on the trail. The chaparral proved to be heavier than they had supposed; also, a part of it had been burned over, and

underneath the green growth there were charred stumps, still very black and dirty to the touch. On reaching home Jack met her mother at the door. "Don't think, mother," she explained, "that because I am smiling all my bones aren't creaking."

"Jack," her mother exclaimed, "if you are smiling, it is quite 'lost' on me. All I see is a line of soot where your nose used to be." At this accidental rhyming they both laughed and Jack was forgiven.

However, Jack and Lloyd's faith that they would become explorers was not futile romancing; under the impulse of their imagination they were acquiring a lot of valuable information and some fine traits of character. For a moment, though, all these interests were forgotten and Lloyd sat on the cliff frowning frightfully at the sea.

Suddenly a voice said, "A pretty good looking beach, isn't it?"

Lloyd looked up and there stood Père Long. "Surely is," he answered. Then Lloyd remembered that he had been wanting to ask Père Long

some questions about the Chumash Indians. Interesting archæological remains were being found in and near Santa Barbara, and the people there were becoming interested in these early inhabitants.

"Were the Indians living on the islands as well as on the mainland? I mean before the Spaniards came," Lloyd asked.

"Yes, between the Indians of the coast and the Channel Islands there was a constant exchange of food, implements, etc. Some of the boats used would carry from a dozen to nearly two dozen men."

"Large; how were they made?"

Père Long stretched out on the grass. "You know the soft black sticky particles which one sees sometimes on the beach?"

"Yes," Lloyd nodded.

"The tribes about here made good use of them. The Indian would place some of these particles of bitumen, or, as it is often called, asphaltum, into a stone vessel and heat them over a slow fire; then, removing what impurities he could, he would drain off the liquid bitumen into abalone

"Some of the boats would carry from a dog to two dozen men"

shells and set it aside to cool and harden. When it was needed for any purpose he would reheat it by depositing small heated pebbles on it. It would then become liquefied and he could pour it where needed. This liquid bitumen helped the Indian artificer in making many articles, but especially in building boats. At Ventura, or perhaps Rincon, places a few miles east of here, Portola, one of the early explorers, and his soldiers found excellent boats; they are described in the log of the *San Carlos*, Portola's ship, as being twenty-four feet long, made of pine boards tied together with cords, and covered with asphaltum."

"Be interesting to see one. How about the Indians? The Chumash were a little superior, weren't they?"

"Yes, they are said to have been 'larger, better formed, and of rather superior intelligence to other Western tribes,' and they are described by an early explorer as being 'well made, fair complexioned, and pleasant featured' and 'they wore their hair very long and tied with long strings interwoven in the hair, and to the strings they

attached gewgaws of flint, bone, and wood.' However, the Indian did not value a growth of hair on his face as he did that on his head. In fact, he entirely disapproved of anything of the kind, and if there were any straggling hairs he pulled them out with bivalve shells."

"That may have been an improvement over the razor. How about clothing—paint and feathers—the fashion?"

"For the most part, some of the men of the coast tribes had tunics of deer or sealskin or rabbit skins sewed together, but they seldom wore them. The women, however, were always clothed. A petticoat of grass was the usual costume, but some had a one-piece dress of skin, fringed at the knee and embroidered with small shells. Mocassins were of course worn and *their beauty-parlor accomplishments were almost unlimited*."

Père Long said the latter in a loud tone of voice to attract Jack, who was returning.

Jack opened her eyes wide and asked incredulously, "Are you and Lloyd talking about 'beauty-parlor accomplishments'?"

"Yes," answered Père Long, sitting up, "come and sit at my feet and learn."

Jack followed a steep path up the bank and sat down with exaggerated courtesy. "Nothing interests me more," she informed them, taking from her pocket and skillfully manipulating her latest compact.

"I have just been explaining to Lloyd," continued Père Long, "that in appearance the Chumash Indians were above the average."

"Excuse me!" interrupted Jack, "I am not interested in the aborigines, and I hear the breakfast dishes calling me."

"Oh, do sit down," Père Long urged, laughing. "You will get many points on the art of 'make-up' if you will remain." Jack looked doubtful but sat down.

"These noble Indians," continued Père Long, "had many beautiful articles of adornment which, if studied, might give one an opportunity to start some unique fads in the matter of jewelry. For instance, they had bracelets and necklaces, which were made of small pieces of ivory or small pebbles and stones, ground round

and perforated. Then they had ivory earrings which I *understand* were something like eight inches in length. And we are told (I do not know how authoritative the source) that 'around Santa Barbara rings of bone were worn in the nose; but at Los Angeles nasal ornaments were not the fashion'."

"Père Long," interrupted Jack, while trying to get the chain of her compact attached to her nose, "I don't believe you know what the word 'make-up' means."

"Certainly I do," returned Père Long. "Viscaino, the explorer, saw natives, not here but farther south, painted blue, with a thin coating of some mineral substance like silver. You might try that. Less blue and silver were used here, but a great deal of red was used and a little green and white. Girls were tattooed in infancy on the face and arms, and they used red paint as a safeguard to the complexion from the effects of the sun. Warriors and dancers were attractively adorned with paint and feathers, and altogether this early Santa Barbara must have been as colorful as that of today."

"But not so gay," Jack asserted. "They had to spend all their time looking for something to eat."

"By no means," Père Long corrected her. "Food was easily procured here, and the mountains, to a great extent, protected the Chumash Indians from their enemies, so they were as gay as they were lazy. They gambled and sometimes they danced for a week at a time. Bancroft says that 'they dance at a birth, at a marriage, at a burial; they danced to propitiate the divinity and they thanked the divinity for being propitiated by dancing.' They had music, too, produced by singers and the rattling of shells filled with pebbles. The next time you and Lloyd visit me I will show you some fine specimens of Indian whistles, and Jack shall be presented with an abalone shell containing all the necessities for a proper Indian make-up."

"I'll be glad to get my paint cup," Jack returned; "but the Indians themselves disgust me; the squaws let the men knock them around too much. You men like to think of those early days because you picture a glorious looking chief in

paint and feathers striding on before while his squaw stumbled along back of him, carrying a baby, the family trunk, all their household utensils, a grist mill, and provisions to last a year."

"But, Jack," Père Long argued, when he could, "you must remember that the Chumash Indians had a high regard for women. When Cabrillo reached a port which was near what is now Gaviota Pass he found an old Indian woman there who was chief not only of that town, but of about fifteen others stretching westward along the coast; she came in an 'independent new-woman way, alone in her asphaltum-lined canoe,' and traded Indian articles for Spanish gew-gaws; she visited the different ships and danced for the Spaniards and made quite a 'stir' by calling the Indians from her other villages, probably to help reprovide the Spanish ships with wood and water."

Jack gave a sigh and said: "If I'd been in her mocassins and been a chief, I'd have changed things a bit. I would have seen to it that from that time on the Indian men washed and wiped all the pestles and mortars, the stone bowls and

cups and saucers, or have lost their heads for not doing so."

Just then some one else joined their group, Scott Dwight, a friend of Jack's—a boy whom Lloyd had met before but had seen little of, as Scott lived in Santa Barbara and had been attending the college there.

"Am on a five-mile hiking trip to a friend's home," he explained. "He lives up the beach about a couple of miles farther."

"Have you warned him in regard to lunch?" Jack asked.

"Experience is the best teacher," Scott laughed; "his family have prepared for me before. And by the way, Lloyd," he continued, "now that college is over, I am coming down to live in your adobe and fish and swim with you. Don't mind a self-invited guest, do you?"

"Might as well telephone your parents that you won't be home this summer."

"Nope. Dad is away and I have to go back and defend mother and the family teacup from the burglars she has been expecting for the last twenty-five years."

Scott had a happy, boyish, pleasing face, sand-colored hair and eyes, and, as he expressed it, "sand-colored complexion." He was enthusiastic, energetic, and considerate, and Lloyd was glad of his friendship and that he would now see him more often.

In a few minutes he left, taking Père Long with him. Then Lloyd walked home with Jack, whose home, for once, seemed much too near, for it was within a stone's throw of where they were sitting.

These two lived a few miles east of Santa Barbara, in a suburb called Montecito. They lived on a wooded driveway called Mariposa Lane, which ran at right angles to the beach and to the main highway, which was half a mile away. There were four homes on this driveway, and they were well built and attractive, and Mrs. Hartnell, when house-hunting, had been very happy to find one of them for sale; valuable property which would grow more valuable as the big estates would jealously stretch out to prevent the encroachment of the smaller homes.

All these homes were situated on the left-hand

side of the driveway as one walked from the ocean, Lloyd's home being the first and nearest to the beach; then Jack's. Beyond Jack lived Anita Joyce, who had given Lloyd her kindergarten clay, and beyond Mr. Joyce's home was Père Long's. A small colony of pleasant, wide-awake people, and not another house in sight.

The entire right side of the driveway formed a border to one of Montecito's big estates, and a low stone wall enclosed its sprawling live oak groups and its boulder strewn glades of grass and wild flowers—a pleasing prospect to those across the "lane." Then beyond Père Long's, toward the main highway, and back of these small homes was the property of another big estate, also perfectly kept up and equally as pleasing to view.

All of these homes except Mrs. Hartnell's were Spanish in architecture, or, as the Santa Barbara type of architecture is often called, Mediterranean, because the architects of Southern California have derived so much, architecturally, not only from Spain, but from Southern France, Italy, and Morocco.

Père Long's was the smallest of the four

houses, being a white-walled bungalow with a red-tiled roof, deeply recessed doors and windows, and some interesting wrought-iron trimmings. Not an unusual home, except for its surroundings, for about and over it low-growing, sprawling oaks twisted their gnarled and friendly branches. Here this lover of trees lived alone, except for a servant, a Chinese "boy," who could do anything from cooking to playing the part of chauffeur, and thought that his "master's" existence depended entirely upon himself.

Mr. Joyce, who lived next door to Père Long, owned by far the most pretentious house of the group: a two-story building with white walls and few windows, and these windows either crossed with wrought-iron grilles or finished with small balconies and gay outside drapes, a distinctly Spanish home. To the rear there was a court, where subtropical foliage expressed a note of romance and cast mysterious and changing shadows on sunlit walls.

Mr. Joyce was one of the leading artists of Santa Barbara; Mrs. Joyce was a well-known musician; and Anita, their little daughter, was

seven years old and almost a dream child for that father and mother who so greatly loved beauty themselves. She had white skin, black hair, delicate features, red, full-formed lips, and dark, imaginative eyes which were often dreamy with the beauty of her thoughts or bright and sparkling in response to her delight in some one of her many interests.

Next door to Anita lived Jack Dean, and her home was just a simple white adobe bungalow, but it had an interesting note of protection in the effect of its thick walls, its deep windows and doorways, and its low-pitched red-tiled roof. From the front it looked like a small but formidable fort half hidden in shrubbery and gay blossoms, and in the rear it was guarded by a rock garden where wild flowers fought for position. But inside there was nothing formidable whatever. It was as gay with colors as it could tastefully be: bright drapes at the windows, and chair coverings of the same bright materials; colored candles in brass candlesticks, potted plants and cut flowers, and a host of other bright, cheerful things.

Jack's father was a cripple and possibly their effort for cheer grew out of necessity. Mr. Dean was injured during the World War, and the only work he was now able to do was to tinker with some inventions which he was trying to develop. Their income was small and they had to live very simply, but Mrs. Dean's sunny disposition and Jack's spirit and keen sense of humor kept the small family cheerful.

Lloyd's home, "The Oaks," was built several years before the others and was very different in character: a rugged type of house, cottage in style, with a base of irregularly shaped stones capped with stucco and exposed timbers. A stone walk and stone steps led up to its arched front door of heavily paneled oak, and this walk was bordered with ivy—ivy which spread to the gray stone walls and, climbing there, made desperate efforts to enter the casement windows. Inside, the same ruggedness of character was evident, for in the very center of the house was a massive exposed chimney of irregular shaped stones, like those used for the foundation and walls. This chimney had good lines and was particularly in-

teresting because it had two fireplaces, one in the living-room and one in the dining-room. Then there were two bedrooms on the first floor which Mrs. Hartnell and Lloyd had selected for themselves.

In front of the house was a pretty lawn, and at the rear was a flower garden, but their property did not end there. Beyond the garden was a small grove of live oak trees and, best of all, standing among these trees, an old, old adobe. Lloyd thought this old adobe worth more than all the rest of the property put together. It was built early in the nineteenth century and had one room only, two windows and a door, and a hooded fireplace, which was built into the house later—not at first, for in those early days the luxury of a fireplace was hardly known. Also, at first the windows were without glass or framing; they were just deep openings through the thick walls. The adobe bricks for the house were made of clay bound together with straw, and sunbaked, and as the colonists had no nails the rafters were fastened with rawhide straps. The sloping roof was at first made of tules, covered over with red tiles.

These tiles were made at the mission by the Indians. This tule roof in time gave way, and then a new roof of boards was made, and over it were placed all the old tiles that were not broken. There were enough to come within about a foot of the eaves. The floor was of another kind of tile, like large red square bricks, which were much worn, chipped, and cracked; but possibly it was the weathered walls which helped most to give this little building its air of mystery and detachment.

Lloyd was interested in the history of the old place and asked several people about it. He learned that in its early history the old adobe was under suspicion and was finally found to be a storage room for one of the most notorious thieves on the coast, and this thief proved to be the apparently respectable citizen who had built the house. His name was Pedro Ponce, and finally (in a shooting affray) he was killed. The old house was then boarded up until it was sold to an artist, who made a studio of it. After that it changed hands many times; then the cottage and new adobes were built, and at last the oak grove

and the old adobe were included in the property which Mrs. Hartnell now owned.

Lloyd liked the history of the place. For him the white-walled, red-tiled room was haunted with the spirit of action, of courage, of desperate situations, and also with the spirit of its later owners, artists and writers who had loved it and used it as a studio. It had become Lloyd's to do with as he pleased. He brought to it many things which he valued most highly, even the walnut desk and chair and bookcase which his father had used when he was teaching at an Eastern college. The desk had a secret drawer and was almost a duplicate of one Lloyd had once seen in Salem, Massachusetts, in the "Counting House," a tiny one-room building which stands in the yard of the "House of the Seven Gables."

Two Indian rugs on the floor of the old adobe and an Indian blanket across an old mission lounging chair added color, and two benches, stained a dark walnut and placed along the walls, and some old firearms and Indian trophies hung here and there gave the room somewhat the appearance of a hunting lodge, a comfortable place

for boys to loaf and talk and plan excursions along the beach or up in the mountains. In September, when he should enter college, Lloyd hoped to make many good friends who would enjoy his den.

CHAPTER II

On June the twenty-eighth, nineteen and twenty-five, the recording thermometer at the plant of the Southern Counties Gas Company of Santa Barbara recorded eight slight earth tremors. But, if these tremors were felt, they were probably attributed to other causes. How could one think of danger in a place like this? Not a city, but a village, lost in flowers, practically stormless and glowing with prosperity and happiness.

There were no further tremors from midnight of the twenty-eighth until six forty-three the following morning, when Santa Barbara was visited by the most severe shock ever recorded in that section. It lasted nineteen seconds and was followed by other tremors which quickly added to the destruction begun. The business district suffered most, and here all loss of life occurred. Many buildings became instantly worthless ruins, many others were partially destroyed,

and mounds of débris filled the streets. While thousands of people escaped—miraculously, it seemed.

Only thirteen lives were lost, but it was this loss of life which seemed to grip one's spirit and to strangle all efforts toward cheer, for beneath wrecked buildings human beings might still be suffering.

Quickly rescue crews were organized and steam shovels brought. And then—beside swaying, toppling walls, in dust-laden, choking air and indescribable noise and confusion — men worked frantically, for huge masses of reinforced concrete had to be torn apart and towering piles of brick and stone removed, and night threatened to hamper all efforts—the city would be in darkness.

But a phone call was sent to Hollywood and hurriedly by auto a motion-picture director brought a Klieg lighting system used in film work. The sections where rescue work was in progress were flooded with light, and the next day the last body was taken from the ruins.

For miles along the coast the quake was felt

severely; many homes were damaged, and a few were destroyed, and the Santa Barbara lighthouse swayed and fell.

In the Santa Ynez Mountains, above Santa Barbara, rock slides made impassible mountain trails and roads, and Sheffield dam went down like a plaything erected by children. A thirty-foot wall of water rushed through the break, carrying away a grader and a tractor and the water main itself, sweeping along huge boulders and uprooting trees along the bed of the stream. It had spent itself by the time it reached the city (one of the outlying sections), but it added to the terror of many whose homes were already damaged by the temblor.

But the damage *not* done proved as great a surprise as the sudden destruction, for many slender ornaments and vases of flowers remained standing upright (apparently contemptuous of the disorder about them), and several valuable egg collections seemed to take the whole thing as a frolic, dancing about merrily but uninjured, to the relief of those who owned them or were interested.

Owing to a broken main, the city was without water for several hours and without electricity and gas for days, and the order was given that no fires should be built in homes, so the people were practically forced outside, and there was an unusual amount of friendliness and appreciation of one's neighbors, and more talking was done than Santa Barbara had ever known before. Those who had oil stoves were thought to be most fortunate; others cooked on open wood fires. Many were afraid to sleep inside, and some who had neither tents nor canvas found their bedding wet with dew when they awakened.

Soon tales of heroism were being spread abroad: girls of the telephone exchange were at their switchboards in a building which was badly damaged and might fall any moment; a chemistry teacher of the high school, realizing that the chemicals stored in the school laboratory might start a fire, had run to the building and fought the flames himself until the fire was out; doctors and nurses had risked their lives to remove patients to places of safety; hotel proprietors, clerks, and bellboys had assisted guests, and

that two men especially had saved Santa Barbara from fire: as the walls of the power-house gave way, the engineer (though injured) made his way to the switches and turned them off, and the engineer of the gas plant, regardless of his own safety, remained to turn off the gas.

And it is said that, while others rushed for safety from a Montecito hotel, a geologist sat in his bathrobe, intensely interested in the quake and carefully noting its effect, and that when the manager returned to find him, the geologist exclaimed "Wonderful! Wonderful! I've chased these things for years, but this is the first time one ever caught me."

Then how quickly all those forces that could protect the inhabitants came into action, from the American Legion to the Girl Scouts and Boy Scouts, who helped with such splendid spirit. Canteen and first-aid stations were established and every help given to those in need. But many who could have helped most were away on vacations—quickly they returned. No city gives more than Santa Barbara and no city is more greatly loved.

CHAPTER III

THE MORNING of the twenty-ninth of June found Jack up early. The night had been sultry, oppressive, "dead," as she expressed it. Seismologists say that weather conditions are never the result of earthquakes or of approaching disturbances of that kind, but such a night it was, and that morning Jack and Lloyd were on the shore before six o'clock.

They romped in the water like two six-year-olds, splashing and chasing each other and throwing shells and pebbles with fairly accurate aim, usually at each other. Mrs. Dean came down to the beach and they tried to make her a judge of who was the best shot, but she said that it was impossible to judge one's own, so they swam far out beyond the breakers—Lloyd keeping near Jack because she was allowed to do this only when he was there to guard her with his swift, strong swimming.

Both of them appreciated the remarkable

beauty of the water in the early mornings; it was usually misty, yet luminous, an ocean of pearl and lavender tones shot with silver, and sometimes just touched with the gold of a clear rising sun.

Six-thirty found each of them home again. Lloyd's mother was up and nearly dressed; she, too, had found the night oppressive. "Had a great swim," Lloyd called to her, as he passed her door. "Some morning I am going to drag you down there and force you into the water at 5 a. m. Just what you need to make you as strong as a prize-fighter."

"Maybe so, Lloyd," she called back to him, but my fighting would have to be done in another world." Lloyd laughed at his mother's answer and went into his room and over to his chiffonier; to do this he had to go almost entirely around his bed, for he had placed his bed near the door that he might have a big, open light space on the other side of it for a chair, a table, a bookcase, a chiffonier, and a magazine stand.

He had almost finished dressing when he heard a strange noise—scarcely a rumble—very

distant. Some people are much more awake to noises than others. Lloyd had spent months at a time camping in the deep forests of Maine, where one listens for protection. He had never experienced an earthquake and the thought of one did not occur to him. A slight noise, a slight vibration—could it be a heavy truck passing? Trucks seldom passed their home. He remained tense, listening, feeling; it was just as though he were making some violent effort to understand, to sense occurrences, before an impression of them could reach his mind. For a moment, at first, it seemed as if his very concentration upon this unusual noise and the vibrations of the floor made the noise inaudible, deadened his sense of floor movement. Then the floor began to rock and the noise became suddenly terrific; it came in great gusts of slow, even pulsations of massive wind-like roarings, in too low a key and too tremendous a volume to resemble any sound that could be made on the earth. It was the rolling, thundering announcement of vast changes in the interior of the earth, sending out rapid vibrations through the rock crust.

His mother! Lloyd ran. He got around his bed and almost to the door before he lost his footing and fell back and forth from the bed to the wall, and once stumbled backwards, just catching himself in time to keep from going down. But even then he could not advance. It seemed minutes—not seconds—that he remained there being knocked about. His mind was filled with some very distinct impressions: it was an explosion beneath the house; probably there would be a fire; should the floor give way, would he be able to make his way through the wreckage and find his mother? He realized that her room *might* be destroyed. The thought drove him frantic. He struggled forward and then found himself free to move more quickly. He realized that it was an earthquake and that the first shock was over.

He ran into his mother's room—she was not there. Then into the living-room; she had just gotten to her feet and was standing near the fireplace; she had come in there to raise the shades and was thrown to the floor.

"Get outside!" she called to him, "I'm coming." But Lloyd saw that she was hardly able to

stand, and he put his arms under hers to help her. As he did so he noticed that the inside chimney had been wrenched on its foundation and had cracked and broken in several places. He realized their danger. They had taken only a step or two when another quake came and the chimney fell with such force that some of the heavy stones broke entirely through the floor, leaving just a heaped-up mass of brick and stone.

Lloyd saw it totter; he had time only to swing his mother to the floor as far from danger as he could and fling himself across her, shielding her face and the upper part of her body from the falling débris; a moment of violent pain, and he knew nothing more.

The temblor was over. There was not even the tick of a clock in that room where a moment before there had been the utmost confusion and noise. Clocks stopped that morning in Santa Barbara.

Lloyd's mother was slightly stunned from being so suddenly flung to the floor. At first she felt only oppression, as though she were struggling in vain in the midst of some unknown catas-

trophe. Then she became gradually aware that she was pushing upward, trying to free herself. Slowly came the painful realization of what had occurred; clearly defined the fact that she was pushing upward against Lloyd's dead weight—that he was making no movement—that he must have been seriously injured or killed.

As quickly as possible she released herself and then Lloyd was in her arms, and she was calling to him and wiping blood from a wound on his head, but he made no movement. With trembling hands that seemed hardly able to grasp the boy, she tried to lift him; she would take him away from further danger. She became frightened, she could not lift him, her efforts became more and more frenzied and less effectual. Horror, as though it were the suffocating dust of the room, seemed to hold her down, making her efforts useless. Then she gave up—they were trapped; it was useless to struggle. For the first time she looked about her.

Above a heaped-up mass of stones and bricks (the rubble of the former central chimney and fireplace) was a ragged opening through which

she could see into the dining-room. The rug on which she had been standing a moment before was entirely covered with débris; on the floor were pictures, broken ornaments, books — destruction everywhere—a table had been splintered near them and the scattered fragments of a lamp lay about them.

Then there came another temblor, and in terror she watched some precariously balanced stones sway and topple; one of them rolled over and over, tumbling toward them; it crashed into the broken table. Trembling and gasping for breath, she again determined to take Lloyd to safety. She was fully aware now of the difficulties, but one thought seemed to steady her nerves: she had always won out, she would now—"she found her grip tightening on the thing to be done."

Struggling to keep her mind clear and not to faint again, she slowly cleared a path, throwing aside bricks and broken glass and moving chairs. The sunporch was nearer, but two of the windows there had been shattered; she would take him through the front door; only at the steps

would she have to lift his entire weight, and she would take her time there and save her strength. Each difficulty was noted and an incisive effort made to plan so that success would follow; and success did follow, and when she laid Lloyd down, far enough away from the house to be out of danger, her mind had been so absorbed with her efforts for him that she was wholly unconscious that her hands and feet were bleeding and that she had a deep cut on one arm. She took off a white dressing jacket which she had on and began to tear it up and to bandage Lloyd as best she could.

Then Père Long arrived. He had made a swift flight through the colony to see if all were safe and uninjured. He took Mrs. Hartnell's place and silently worked over Lloyd for a few minutes. Then he tried to assure her. "Don't be frightened; he'll be all right; I'll get a doctor. But let me bandage your arm."

"I can do it myself," she answered; "please hurry."

So Père Long ran for his machine and started for a retired doctor who was living some distance

out the main highway. This doctor had already started to town to offer his services to one of the hospitals. Père Long met him less than a mile away. He explained that his help was needed, and in a few minutes Lloyd and his mother, too, were receiving the best of medical attention.

When Lloyd came to, he was lying on a bed in a tent and a doctor was bandaging his head, but for a few minutes he was aware only of the confused noise of voices. Pain kept his eyes closed. Where was he? Why? And what was that awful thing boring into his head? Then gradually he remembered. At last he became conscious of what the doctor was saying: "You must leave here in a few days"—he was talking to his mother. "We are certain to have continued earth shocks; they probably will not be severe, but your heart will not stand the strain. The boy cannot travel now, but I think he will be able to in a short time. I contemplate no serious trouble if he is kept quiet until the healing process gets well under way. But as soon as he can be moved safely, you should leave here and remain away for at least three or four months. You need quiet

and rest, and I doubt if Santa Barbara is going to be restful for a while. Usually, it is several months or longer after a temblor before the earth finally adjusts itself. Very particular, very particular," he said, "this charmingly beautiful California of ours, about just how its bed is made, forgetting that we might want to sleep."

"Well, that's better!" he exclaimed, as Lloyd opened his eyes. "We've missed you." Then he laid his hands over the bandages which crossed Lloyd's forehead and rubbed his cool fingers about his eyes.

The pain had been so intense—but this doctor's touch! Lloyd gave a sigh of relief. He knew now that he could stand the pounding in his head; he had so wanted to groan or cry or do something men are not supposed to do.

"Keep him quiet," the doctor said. "Keep the neighbors away." He looked at Lloyd and nodded his head in a knowing way. "Entirely too popular. I had to shoo away about a dozen neighbors myself."

Lloyd smiled and said shakily, "Rude of them to come so early, before we were dressed."

Then the doctor left and Mrs. Hartnell again had her boy to herself. Neither of them spoke at first, but in this silent period, fraught with so much feeling and understanding, there was something of the strange and beautiful possibilities which lie very close at hand but which we seldom succeed in realizing.

Later Mrs. Hartnell went into the house to see just what damage had been done and to finish getting dressed, for she was wearing a robe which Mrs. Dean had brought her to take the place of the dressing jacket she had used for bandages.

After his mother left, Lloyd's thoughts returned to the kind old doctor who had made things easier for him. This brought to his memory what he had said to his mother—that she must leave Santa Barbara in a few days, as soon as he, Lloyd, could be moved. Suppose his old adobe had fallen and he would not be able to see for himself the amount of damage done. Why, his things might be scattered everywhere! He had valuable papers in his desk. Suppose his desk had been crushed by some of the heavy beams, and his bookcase, too! And his mother had her

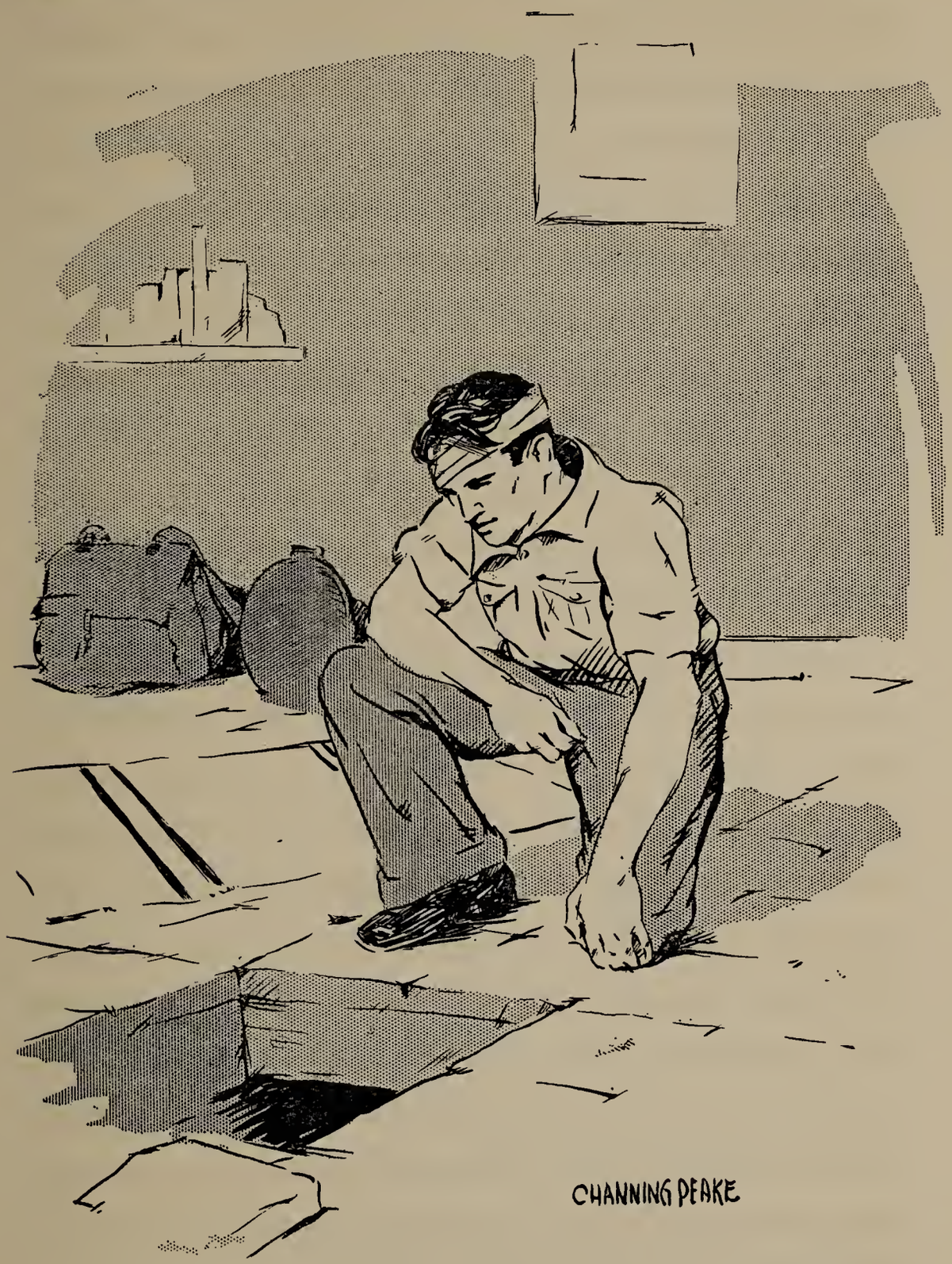
hands full—all that she could do. He would attend to these things himself. And very foolishly he got up and started for his den.

Lloyd staggered all the way, and if some tree trunks had not now and then afforded assistance he would not have made it. However, he was delighted when he did reach the old house to find that it had apparently suffered little damage. Yet, he was not satisfied; he wanted to see the inside. He tried to unlock and open the door. It stuck slightly, and in pushing it open he fell; the jar made him sick. He sat down in the doorway and rested and then dragged himself further into the room and looked around. The walls were intact; only the upper part of the chimney had been wrenched off and some of the débris had fallen inside. Few of the old adobes withstood the temblor. This one was small and better built than most of them and it had had excellent care.

Just then another temblor came, and Lloyd nearly fell into a square opening which was immediately in front of him. A heavy Indian rug lay across it. He drew aside the rug and found that four tiles had dropped out of the floor—but

where had they fallen? The house was built on the ground. He looked down into the opening; apparently he had found the entrance to a tunnel. Suppose it led to a secret hiding place—used by the notorious thief for stolen goods!

Lloyd put his hand to his head; the pain was almost more than he could bear, and there was so much that he wanted to do. He waited for a moment and then he realized that he would have to give up; he was getting more and more sick and more confused. He dragged the rug back over the tunnel opening and managed somehow to get outside and lock the door. Then he lay down on the ground, too exhausted even to try to get back. But his mind was busy. They were going away for weeks, perhaps months. He could not leave his adobe, with its secret, unguarded. Someone would be sure to peer in if only to see how much damage was done. With the rug he had re-covered the opening, but even a slight temblor might cause other tiles to fall, and temblors were occurring constantly. He would have the whole thing boarded up. Then he staggered back. His mother had not missed him; he was



"Apparently he had found the entrance to a tunnel"

glad of that. But just as he reached the tent she saw him and came running out. She was horrified to find that he had been to the den and more unhappy when she found that he had torn open the wound on his head which the doctor had sewed. About this time Lloyd was very unhappy himself, because he knew he was giving a great deal of trouble. Yet it was a comfort to feel that the old place would be taken care of, for his mother promised him that she would try to get someone to board it.

Later on, when he felt more like talking and his mother felt less worried, he would tell her about the tunnel. He had laid a rug over the opening and had locked the door, and his mother or Jack could get his papers from the desk if he were not allowed to do so before leaving. It was not necessary for the carpenter to enter, and it was not likely that there would be another big quake, so probably his tunnel would "keep," just as it had kept for the last hundred years or more. But what tough luck to be held up this way when there was so much to do. His mother, too, was overtaxing her strength, trying to get things

straightened again. She should not be doing that; he should. Oh, well! He hadn't asked to be struck on the head with a ton of stones nor to fall and open up that wound over his temple, nor to———and on and on, until he wished he had no brains, that he could just lie there and get well without them and then have them magically return to him when he should be in need of them again.

Doctor James was too busy to come back in the afternoon, but he came in the early evening and sewed up Lloyd's head again, and told him that if he even dared to sit up in bed he would bring a strait-jacket with him on his next visit. Then he looked at Lloyd, critically. "Pretty tough, pretty tough," he said; "he'll be all right, don't you worry," this to Mrs. Hartnell, "and you are to rest, you understand. In a few days I shall ship you both. Would like to ship myself," he laughed, "but at present no doctor could find passage out of Santa Barbara. Though we are getting along famously, everywhere one finds helpfulness and courage and hope. It puts new strength into the old folks to find so much good-

ness in the world." And he was off to work all night as he had worked all day—one of the many to give of their strength until exhausted. And Lloyd knew all the bitterness of being cared for when one really wants to help.

For the next two days, though, he knew nothing but pain and a confused dream that his mother had left him; that she had been away for hours and that he would not live until her return. As a matter of fact, his mother left him at no time for more than a few minutes. She had a workman there who was removing débris and trying to make the house at least safe for her to enter. To him she gave directions now and then, and each time hurried back to Lloyd, who was in such pain that only her constant care enabled him to bear it. Neighbors cooked for them and helped in every way possible, but no one else was allowed in the tent. So Lloyd and his mother struggled through those two terrible days together; after that he was much better, but exhausted.

On the fifth day he began again to take an interest in life and to consider it worth the struggle, especially as Jack came to his tent in the

morning and pulled aside the flap a little and whispered: "Lloyd, they won't let me come in and they will murder me if they find me here, but I must tell you how terrible it has been to have you so ill. Isn't there something I can do for you?"

"I'm all right. Come often, and I will be out in a day or two."

"Your mother is coming," she whispered; "I must run."

"I'm going to send you a note," Lloyd whispered, and Jack was gone.

When his mother came in he asked her for paper and pencil, and she finally gave them to him on condition that he would not write for more than a couple of minutes. "Jack," he wrote, "I have missed you far more than you could possibly have missed me. I have the most exciting news for you. Our exploration, at least a part of it, is to be right here at home. Will pester mother until she lets me see you. She says now I must close. Your visit this morning nearly put me on my feet. Don't you dare desert me again.—Lloyd."

That evening Mrs. Hartnell gave Jack the note, and for the first time since the big temblor Jack slept all night and far into the morning. Why not? Lloyd's note was under her pillow; he would be well again, and soon.

When Mrs. Hartnell returned from Jack's, Lloyd said to her: "Mother, I've asked you again and again how all the neighbors fared during the quake, and you haven't told me yet—at least you haven't given me any of the details."

"I've purposely not given you the details because I've wanted you to hear their own accounts of just what happened. Now I have a surprise for you. I've invited some of them to come here tomorrow afternoon, to hold an 'experience meeting,' so you will probably hear nothing but earthquake talk for an hour or more."

CHAPTER IV

THE NEXT AFTERNOON the "experience meeting" started promptly at three-thirty in the Hartnell tent, Père Long, Jack, Anita, and needless to say, Lloyd being present.

"Lloyd's not allowed to do much talking," Jack said, "so, Père Long, you give your experiences first, for you did more real good than Anita and I, though I saved two lives," she said seriously, "but this heroic act has not yet been appreciated. Anything that *I* do is considered a joke!" Lloyd smiled. "You see," continued Jack, "Lloyd's grinning superciliously, and he doesn't even know what it's all about. No one will have faith in me."

"We all have faith in you," Lloyd assured her, and then added "to do the unexpected."

"Lloyd's sick," Jack returned; "he's very ill, snappish, and testy. Père Long, will you please give us your experiences?"

Lloyd sighed and said, "I wonder how big a

quake it would take to shake that ill temper out of you."

Père Long smiled in spite of himself, "Perhaps I'd *better* give my experiences," he drawled. "It seems to be an excellent moment to redirect our thoughts."

"Do," urged Jack, "we are frightfully bored."

"To begin with," Père Long continued, "it is not at all difficult for me to remember where I was when the big temblor came—for I was in my bathtub. As the water was running I heard no warning grumble, but suddenly the tub began to tremble, then to trot, and finally it broke into a fast, erratic gallop, with the water from it flying wildly about the room, while my ears were filled with those weird, gruesome, disconcerting, tremendous sweeps of noise with which we are all familiar.

"I stepped out of the tub as soon as I could, considering its behavior, and used what speed I could in dressing. Then, as soon as I could convince that domineering keeper of mine that the gods were going to permit me to live another day I ran over to Anita's. They were all safe, so I

went by Jack's and saw Mr. Dean standing in the yard, watching Jack and her mother, who seemed to be giving some kind of an Indian dance. I wanted to join them and see what it was all about, but decided to wait until I could make sure that Mrs. Hartnell and Lloyd had fared as well as the rest of us, and, as you know, when I reached here I found Lloyd lying on the ground and Mrs. Hartnell trying to care for him when she was scarcely able to stand herself. We found a doctor practically at our door and daily I hear of people who were just as fortunate as we were. I think in the midst of bad luck there was more real good luck floating around Santa Barbara that morning than ever before congregated in any one place."

"But it has ruined everything," Jack declared, "and now that Lloyd and his mother are going away there won't be much but 'quakes' to think about. Now, that's a nice thing to say, isn't it? But you and Anita know what I mean—we *will* miss them *dreadfully*."

Lloyd looked at Jack. He felt that he was leaving Santa Barbara at a time when he especially wanted to remain. Boys much younger

than he were giving volunteer service in town, and here he was cooped up in a tent, able to do nothing; and suppose there should be another severe temblor and Jack should be injured and in need of help? "Well, I don't want to leave," Lloyd said seriously, "I feel like a quitter, but you know the doctor said mother should go."

"Lloyd," Jack assured him, "I'm a quitter, myself. Of course you both must go. I know that, but I feel awfully disagreeable about everything. I guess this earthquake has just about ruined my *notedly fine* disposition."

"Jack," Lloyd returned, "you know you are a heroine. Go on and tell us about the two lives you saved."

"That's right! Had forgotten that 'thriller.' You see, after we came in from swimming, I fooled about my room for a while, dressing slowly, and then I sat down on the bed to put on my shoes and stockings. The bed began to shake and I heard a terrible noise, but I thought every second it would stop, and the next thing I knew I slid right out from my bed and into my closet, and a pole for hangers fell down and all the

clothes I own fell on top of me. I unfurled myself as fast as I could, and by that time mother was in my room. Luckily, dad was up early and out in the yard. 'Dad is safe,' mother shrieked at me, 'get outside!' And then another quake came, and we began to dodge furniture which seemed determined to run us down, but when we reached the dining-room I saw my precious glass bowl lying on the floor, shattered, and my two beautiful fantail fish lying there gasping. I picked one up in each hand and ran out into the yard and held them under the hydrant, and squealed for help until mother went to get something to put them in. I think I thought mother was going to manufacture a bowl right there in the yard, for I felt dreadful when I saw her enter the house again. Mother says that as she opened the cupboard door she felt a familiar tremble and just grabbed the first thing her fingers touched—luckily, it was a soup plate.

"I ran into the house to save mother, with the fish still in my hands, and we met head-on at the dining-room door and nearly knocked each other down. I don't know how we got out into

the yard again, but we did, and filled the bowl full of water and put the fantails in. You would have supposed that there was nothing else of importance in all Santa Barbara except those two small fish."

"And what was your father doing all that time?" laughed Lloyd.

"Oh, he picked himself up from the ground and stood calmly by. He didn't know *why* we were rushing about so wildly, but he was prepared for the worst and was terribly disgusted when he saw what had caused the commotion."

"When 'quakes' come," Anita added, "mothers and fathers get more excited than their children."

Everyone laughed and turned to her.

"Did your mother and father get excited?" asked Lloyd.

"I should say so," Anita answered. "You see, I thought it must be a thunderstorm, and I'm not afraid of storms usually, but I thought this must be an awfully bad one, so I got as far down in the bed as I could and pulled all the bedclothes on top of me. Mother and dad ran into

the room and thought I was not in the bed, so they ran outside, but they couldn't find me there so they ran back into the house. And mother says she fell five times, and dad says most of the things in the house wouldn't have been broken if he hadn't run into them and knocked them over while he was looking for me. At last he decided I must be in the pile of sheets and blankets on my bed. Another quake came and he couldn't get me out, so he just took up the whole thing and carried it out in the yard and unwrapped me.

"I haven't been in the house since," continued Anita. "We eat outdoors and sleep in a tent, and I have a tin basin and the ocean to wash in, and I wouldn't get in a bathtub for anything, not when dear Père Long nearly got knocked out of his." And Anita put her arms around Père Long's neck, just to show him how glad she was that he had conquered the wild tub.

Then Mrs. Hartnell came in and said that time was up; that Lloyd had talked enough for one day and laughed enough for six.

"But, mother, I want to ask one question," Lloyd insisted.

"Very well, just one," his mother answered.

"I want Père Long to tell us what *caused* the earthquake."

Everyone laughed, for Lloyd was certainly making the most of his opportunity to ask one question.

Jack moved a chair nearer to Lloyd's bed. "Sit down, Père Long, and spend a week or two and discuss the little matter with him."

"No," he laughed, "our time *would* be a little limited for a discussion of the many theories as to the causes of earthquakes, but I will explain this—that in the vicinity of Santa Barbara there are several natural faults or splits in the rock, miles long and miles deep, running far down into the crust of the earth. Of course they are closed tightly. These faults were formed ages ago by great pressure being exerted against this part of the earth's crust. Great rock masses under the sea, probably to the south, have pushed with stupendous force for a very long time against this coast and against the mountain range here. Geologists differ when they try to give reasons for this pressure, because there are several theories as to

what has caused the rock crust to be heaved up and split as it is, but the faults are there and the pressure has continued, and had this pressure not been exerted against this part of the globe, Santa Barbara (instead of having its glorious background of mountains) would now be about six hundred and fifty feet below sea level.

"Seismologists, or those who study earthquakes, knew of this strain and felt certain that sooner or later some of the great masses of rock that underlie this section would move slightly along the line of their faults to positions where there would be less strain. And that is what happened on June twenty-ninth. There was movement along two or more of the great rock faults running through or near Santa Barbara; just how much movement there was, and on which faults it occurred, has not been determined, because faults seldom show plainly on the surface of the earth, but neither in extent nor fault displacement was this a notedly *big* temblor."

"What makes it keep on shaking?" Anita asked.

"These great rock masses cannot immediately

come to rest; they have to ease themselves into their new positions gradually. You know what happens when you try to sit in your baby chair."

Anita nodded her head. "I can hardly sit in my baby chair now. I have to just wait until I can squeeze in."

Jack laughed. "And what makes the big noise?"

"The noise is said to be caused by changes going on under the ground, followed by rapid earth waves along the surface."

"There are some faults in practically every region, aren't there?" Lloyd asked.

"Yes. Don't think that beautiful Santa Barbara claims all the leading rock faults of the globe. Those around here are minor ones. There is one big one that begins at the tip of South America, proceeds up its coast line to North America, and thence to Alaska; then down to Japan, ending in New Zealand. Another one extends from Asia to Southern Europe and into the Atlantic. These are two large ones. We won't try to enumerate the smaller ones. They are practically innumerable, and there are prob-

ably new faults, especially smaller ones, being opened up constantly. Seismologists are here now studying the faults in and around Santa Barbara."

Jack gave a sigh. "Seismologists, seismologists—how I love that word! What a shock it would be to Professor Bell to have me use it. Think up another one, Père Long, and give it to me just at the beginning of the next session. You know one must do something striking right in the beginning of a school term; then let the attention of her teachers turn to other students less fortunate—Lloyd, for instance. He will be new, and for the honor of Santa Barbara his teachers will have to prove that Santa Barbara schools are better than those of New York."

Lloyd was about to give a spirited reply to this when Père Long began dragging Jack away. "I will have her gagged before I bring her over again," he told Mrs. Hartnell.

But Jack was there the next morning, and Lloyd had a long talk with her. She was immensely enthused about finding the tunnel and assured him that she would go every day to the

old adobe and make sure it remained boarded, for the job had been done well. They thought it unlikely that anyone would enter for the purpose of stealing, for the only things of value there were the desk and bookcase, and if stolen they were hardly articles which could be easily or safely disposed of. As to the opening beneath the floor—no one knew of that! So no doubt the old place would remain as it was until they were ready to explore.

Later Jack went to get Lloyd's papers and letters from his desk and had a peep into the black hole beneath where the missing tiles had been, but examined nothing, thinking *that* should be Lloyd's privilege, though he had urged her not to wait for him, but, without being reckless, to "have a good look around."

CHAPTER V

JULY THE TENTH Lloyd and his mother left for Long Beach, where they had rented a beach cottage. Père Long had produced a luxurious closed car from somewhere—no one knew where—and insisted upon driving it himself. Just one of his many acts of thoughtful kindness. Lloyd was rather scornful of the cushions and pillow which his mother had placed on the back seat for him, but they did not seem so objectionable to him by the time they reached their journey's end.

From their cottage could be had an interesting view of the ocean, of some of the Channel Islands, and of a varied assortment of boats, both pleasure craft and those on more serious errands. In fact, it was an excellent place to recuperate, and Lloyd did it as quickly as the doctor had predicted he would. But his thoughts were elsewhere, and the time until he should see Jack again seemed to stretch out interminably. However, to his mother he appeared to be perfectly

contented, and when he refused to become interested in some jolly and exceedingly interesting girls next door, she decided that he had not quite recovered and so preferred to remain quietly with her.

In the meantime Jack was having a very different summer from that which she had contemplated. In helping at a first-aid station she had made several new friends, among them Ed Belton. He lived on the heights above Santa Barbara, was home from Stanford for his vacation, had his own car, and apparently an unlimited supply of money. He gave Jack the gayest time she had ever known, introducing her to his friends, who became nearly as enthusiastic as he about her.

Jack wrote fully and freely to Lloyd of her gay times, and Lloyd wrote less and less to her of himself. Jack was hurt and a little suspicious. Why couldn't Lloyd tell her of his gay times as she was telling him of hers. She would not believe that Lloyd was sacrificing a summer's fun to some high ideal of loyalty to her.

Lloyd and his mother remained at Long Beach for nearly two months, but not until they were

on the train, on their way home, did he speak of his discovery of the "tunnel."

"Lloyd," his mother admonished, "why didn't you tell me before? We could have returned long before this."

"But I enjoyed being at Long Beach, and no doubt the old adobe is just as it was when we left it."

As they neared Santa Barbara Lloyd felt all of his misgivings in regard to Jack gradually fading. Then, as the train pulled into the station, he saw several of their friends waiting for them. Possibly Lloyd was rude. Undoubtedly he should have spoken first to those friends who were nearer, but as soon as he had helped his mother down the steps of the Pullman he ran down the platform to Jack. He took her aside. "I don't believe it is true," he whispered, "actually seeing you again. It's been the longest six weeks I've ever known. Remember, if I am dragged off, tomorrow on the beach at six a. m."

"I'll be there," Jack assured him, and Lloyd hurried back to his mother, where others were still waiting to greet him.

Lloyd was "dragged off"—in fact, the whole colony—to have dinner at Père Long's. In some mysterious way the latter had persuaded his "keeper" to take an evening "off," and in his place he had an old colored "mammy"—her smile simply irresistible, as she prepared the best things which could be cooked for such a festive occasion. In between times she bossed her grown son, who, in white, assisted her and waited on the table. Where Pére Long found such excellent help he did not reveal; he had found these and others before. Unmistakably, though, they had been loaned to him for the evening, for their training denoted years of perfect and loving service.

Late that night, when Lloyd and his mother went to "The Oaks," escorted by Père Long, they found the house open and lit and flowers in every room. There were tears in Mrs. Hartnell's eyes as she laughed and said, "If there is a temblor every day and night, I will not leave Santa Barbara again."

"But we are not going to have another big quake for seventy-five or a hundred years or more

—perhaps never," Père Long insisted. "We have had our turn, and should we ever have another one, no city will be as well prepared as Santa Barbara. You must see the low, quake-proof buildings we are putting up; and your chimney will not fall again until all the houses in the neighborhood are down." Mrs. Hartnell glanced at it. It certainly *looked* safe.

CHAPTER VI

At six, the next morning, Lloyd came out of his home ready for a swim. He looked over toward Jack's, not knowing whether she had left or not. All was quiet there, and he was afraid to call or whistle for fear of awakening the others, so he slowly walked to the beach. Now that he was at last to have Jack to himself, he felt less assured. No doubt she had found someone else whom she cared for more. How could a girl so popular as she keep him in mind? Especially when he had done nothing for her and had written her such absurd, stilted notes.

He reached the cliff and looked up and down the beach. Jack was nowhere in sight. He felt relieved; he would have a chance to think, and he sat down on the bank with his legs dangling over, as he had the day previous to the big temblor. Then, in spite of his misgivings, he was forced into a slight grin, for he remembered with what derisiveness, as he sat there before, he had

received that one swift doubt which had assailed him as to the earth's stability. Well, her restlessness was noted the next day, and respected, too!

His thoughts returned to Jack. Had he a right to try to hold her to their old plans—plans for the future, now probably forgotten? He would have no right whatever; he must watch out for that. But could he possibly give up Jack, make no effort to hold her? He certainly couldn't! But she was "traveling" in a pretty wealthy bunch and luxuries would mean a lot to her. What a complicated mess life was!

Jack left her home as unassured and doubtful as Lloyd. "I wonder when my thoughts are going to settle down and let me recognize them," she mused. "How can I understand Lloyd when I don't understand myself? Better play, child, play," she advised, "and not be serious for a second." Then she stole up behind Lloyd, pushed him from the cliff, and watched him plow through the projecting earth to the beach below.

"You wait," he called, "until I get you out beyond the breakers. You'll think you are swimming to the islands—under water."

Jack ran down the steep path and said, "What fun, Lloyd, to go out beyond the breakers. Mother will never let me go unless I have some *man* with me. Just as though I can't swim as well as any of you."

"Who's been taking you out?" Lloyd laughed. "Let's have the shock over."

Lloyd doesn't care, Jack thought, or he wouldn't be so cheerful about it. "Look!" she said. "Bet the Atlantic can't beat that!"

Lloyd looked out across the ocean, thinking—Jack has developed a lot in the last few weeks, not so ready to "expose her hand." Then he turned his attention to the scene: no horizon, just a dazzling white light which had become entangled in an early morning mist. Together they were obliterating all traces of the distant sea and sky, while nearer breakers, glinting with silver, were escaping from a fringe of gray ocean and rolling in white foam up the rose-tinged beach.

"No one will ever see a better looking ocean," returned Lloyd. "Come on, let's get in—and be a part of it."

They swam for a while, but Jack felt impa-

tient. What were brains for if not to use? How could she find out what Lloyd had been doing? His letters had revealed nothing. Had things been dismal and stupid—or *thrilling!* She would find out—and if there had been cheer, who had made it. "Lloyd," she said, "let's take a run on the beach."

"Good idea, clear up to the big rock, a rest, and back again."

Lloyd wanted to do some subtle probing himself, but he had little faith in it. "Conversation's the bunk," he told himself. "Who speaks the truth? But a little quiet waiting and most things are bound to come to light."

They raced along the beach, teasing each other and playing with "Shep," who had joined them. Then they reached the huge boulder which Lloyd had designated and sat down with their backs to it, facing the ocean.

"What kind of a time did you have?" Jack asked, and added: "You are a 'tightwad' when it comes to letting your friends know what you are doing with yourself."

"Oh, half and half," he answered lightly;

"you know there are always some compensations. What did you do?"

"What *does* one do, in Santa Barbara?"

"And who's the best playfellow now?" Lloyd laughed.

Jack did not like his lack of seriousness. "Oh, several," she answered, gayly. "They are all coming out here, some day, to swim and meet you."

"Good! I want to meet them," Lloyd smiled, "and size them up—may have a duel to fight."

"His tone is too bantering," Jack thought; "there is some one else."

Then they chased back along the beach and Lloyd saw Jack home. Just before he left her he said, "How about exploring the secret tunnel? Have you time for it after breakfast?"

"Lloyd," she answered, "I am so sorry—I have another engagement. Will you give me another chance?"

"Whenever you are ready."

"Will let you know the first free time I have. You are a good sport to wait for me. I wouldn't miss exploring that tunnel for anything. Re-

member, it has been whetting my curiosity for almost two months."

Lloyd left, but he did not immediately return home. He returned to the beach and sat there with his back against the cliff, looking out across the water. The sun had now broken through and the islands could be seen. The sea was extravagantly blue, the mist had moved back into a pink cloud above the horizon, and the breakers (more playful and plumed in the sunlight) were roaring along—only to become exhausted, when (with absurd importance and no little whispering) they would mystically curve their iridescent films across the warm-tinged sand.

But Lloyd was thinking of Jack.

Jack remained at the door for a few minutes after Lloyd had left, and noticed that he returned to the beach and not to his home. Then she learned through her father that her mother had gone over to Mrs. Hartnell's with a basket of fruit. She decided that she would go, too—possibly she could find out something there.

She took off her bathing slippers and washed her feet with the hose and then danced in on the

two, giving an amusing imitation of one of Anita's dances. When they were through laughing she said, "Forgive me for the intrusion, but I simply had to tell you that I've just had the best swim I ever had in my life." She looked at Mrs. Hartnell. Surely that statement ought to bring something.

It did. "Am afraid Lloyd had a stupid time at Long Beach. Spent most of it studying. After his early morning swim I couldn't drive him out of the house, except to walk with me. There were several fine girls next door, too, Jack. I believe you have hypnotized him."

A few minutes later Mrs. Dean and Jack left. Jack went straight to the telephone and called up Ed, then she ran off to the beach again, calling to her mother that she would soon return. When she neared the beach she went more quietly—if Lloyd was there she wanted to see him off guard. She peeped over the cliff. Lloyd was still sitting with his back to the cliff staring out across the water.

He was hurt; he told himself that he was a fool to feel as he did—to feel, that because he

had spent six weeks thinking of Jack, she should have spent that time thinking of him. What conceit to have supposed that he had occupied even a small share of her thoughts. Well, he would fight for her now! But should he? Luxuries were due Jack for her years of scrimping.

Jack had quietly moved down the bank and had a clear view of his profile. She caught his expression and moved back up the bank until she was very near him. Then she deliberately let herself go as she had shoved him off earlier in the morning. She plunged down through the projecting earth to the beach below.

Lloyd sprang to his feet. "Jack! You shouldn't risk a thing like that. Some day you'll be killed."

"One should be businesslike and direct," she returned. "I changed my mind and came directly over the cliff to notify you."

"And what's the important notification?"

"That I telephoned the Stutz not to come, and at ten o'clock I shall be ready to explore Tut's tomb."

Lloyd frowned. "Better not be too careless with fine cars. There are none in my garage."

Jack put her hand on his shoulder and looked up into his face. "Lloyd, what kind of a time did you have at Long Beach?"

Lloyd smiled. "Busy, Jack. Am ready to take any examination the college will demand."

"Mine was hectic," she answered, "with pleasures. But, Lloyd, every day I visited the old adobe and every night I opened my window and sent you a good wish."

Lloyd drew her to him. "But not your love, Jack?"

"I could never tell. It's early yet—years ahead of us."

"When you came," Lloyd explained, "I was trying to make some good resolutions—chief of which was that I wouldn't try to deprive you of the luxuries you deserve—but you've driven them to the four winds."

"Perhaps it's just as well. I feel so safe in your arms, Lloyd, as though you could protect me from everything. That's the reason I want to fling aside the luxuries and take my luck with you."

CHAPTER VII

AT TEN O'CLOCK the two adventurers were ready to open up the old adobe. They asked Père Long to assist them, but he refused; said he was too busy and afraid of ghosts. Lloyd's mother also refused, but said she would go to their rescue should she hear calls for help.

"This *is* spookey!" Jack exclaimed. "I don't know whether I am going to be accosted by a spirit or bit by a scorpion, but I am *sure* disaster approaches!" She shivered.

"Jack!" Lloyd teased, "you *are* trembling and your hands are cold. You are a quitter. I knew it all along."

"No such thing. I'm just working up a cold disdain for any ghosts which may arise."

"Judging by your condition," Lloyd argued, "the ghosts are here." He pushed her through the door and then stepped inside himself. "I hear them chattering. They are talking gibberish. Jack, you are lost! No doubt about it; and they

are evil spirits, too—thieves and murderers!"

By this time they had pulled the rug away from the opening and to their surprise no secret passageway was revealed, but a large storage vault, formed by cutting away some of the surface earth and sand and gravel beneath the house, a vault much wider than they had at first supposed the opening to be, because when they had peered into it before the sky was overcast, muggy, from the vast amount of dust in the air. Now, the sunshine was pouring in at the door, even lighting up the vault itself.

They found in the vault some broken tiles and boards and sticks, and a piece of deerskin rope, and finally a roll of deerskin—dangling by a hide cord from a wooden spike driven into a board just below the surface opening.

"Let's save that until last," Jack suggested. "We must have something to look forward to, and unless that roll contains treasure, I feel cheated, don't you?"

"Yes, but we aren't through yet," and as the vault had been boarded up entirely on the sides and bottom, Lloyd began to knock off some of

these boards; others were already off, but there was positively no other section to this underground cellar; just the straight excavation three feet deep and four feet square.

Then Lloyd and Jack examined everything again, carefully. Enough remained to reveal some clever devices. The four tiles of the old adobe's floor had been backed by a board and were cemented to it with asphaltum, in the manner that the Indians used the asphaltum found along the beaches for their boats and baskets. The asphaltum was heated to the consistency of glue. The board was then covered on one side with this liquid asphaltum and the tiles nicely fitted together and laid flat on the latter. Then the board was cut off even with their outside edges and its edges rested on a solid ledge which gave way during the quake and let the board and tiles fall into the vault below.

Originally a stick in the vault in an almost upright position, anchored at its lower end to the floor of the vault, could be pulled forward between two boards by a deerskin rope which was attached to the stick near its upper end and con-

tinued out to a small opening in the foundation of the adobe, back of the steps. The rope dangled just inside of this thimble-like opening in the foundation, with little chance of its ever being observed. When Pedro Ponce wanted to get hold of it, he had to use a pair of tweezers to pull it through. The stick when pulled forward by the deerskin rope swung upward between the two boards to a more vertical position, until its upper end curved high enough to push upward against the board backing the four tiles, prizing it up from the floor.

The rope was then fastened near the small opening in the foundation and it was held taut while Pedro Ponce went inside of the house and lifted out the tiles as one piece.

The combined weight of the four tiles, the asphalt, and heavy board helped to hold this trap door in place and made these tiles look less easy to remove than any others because they fitted so expertly against the adjoining tiles and the board to which they were cemented rested so evenly on the ledge made for it beneath the floor. Also, between the adjoining tiles and storage vault below

"Cave of the Indians"

there was a firm foundation. This had not given way and these tiles had not moved.

After Pedro Ponce's death the old adobe was boarded up, and people felt rather superstitious about going near it, as though the little house had of itself brought bad luck. But later its various owners loved it, and if they whimsically wondered at times if there could be hidden treasure, they at least did not take the thought seriously, for they never did more than to prize up a few tiles that had become slightly chipped or loose, and beneath none of these was the storage vault revealed.

When Jack and Lloyd had finished their inspection they turned to the only bit of uncertainty left to them—the roll of deer skin. They opened it carefully and found inside a parchment map. They laid it on the floor, trying to solve its mystery.

"I don't know the mountains here well at all," said Lloyd, "but it looks to me like the cleverest kind of an outline of the peaks back of Santa Barbara. See, this might be La Cumbre and that might be Montecito Peak. I don't know the

others, and these curving marks might be the streams that drain the mountains—and look, Jack, what is this?"

On one stream was an "x" and down on one corner of the map was a very good drawing of a spring, formed in the dry bed of a mountain stream—its water plunging over a high rock and then trickling away down the canyon. The course of this stream was merely indicated by a slightly curving line, but toward the end of this line was a duplicate of the "x" above, and the words "Cueva de los Indios" after it.

"Lloyd," asked Jack, "do you suppose those words could be Spanish for Indian cave?"

"Believe they are. We might have some fun out of this after all."

"You have never seen Painted Cave, near the San Marcos Pass, have you?" Jack asked.

"No."

"Well, it is about fifteen miles northwest of here in the Santa Ynez Mountains. The cave is hollowed out of a huge sandstone rock, and on the ceiling the most curious designs are painted. No one seems to know just what the designs

mean, but they appear to be conventional designs that might represent the sun, moon, and stars, Indian chiefs in full feather, and one strange-looking creature (either an Indian or a god) with a high hat for a head and with arms which curve up and out. Then there are crosses and decorated circles and centipedes and so on, all done in red and blue and white on the tan sandstone. I touched my finger to one figure and before I knew what I was doing I rubbed it to see if it would come off. The guide laughed. 'Better not do that,' he said. 'It's a good thing they are on there tight, or they would have been rubbed off long ago.' I felt ashamed of myself, but it is simply irresistible—not to at least touch these painted designs. The colors are slightly blurred in places, and soft, and against the tan sandstone background give one the impression of an old Indian blanket."

Just then Jack's mother called her. "Such a day!" exclaimed Jack. "We are going to motor down toward Los Angeles to have dinner with some friends, and I won't have the slightest idea of what is being said or what I am saying myself.

All my thoughts will be of this old map and what that innocent looking 'x' means."

"Tell you what I'll do," said Lloyd. "I'll get Père Long in here, if it is possible, and if this has anything to do with the mountains back of Santa Barbara—a few peaks and river courses won't fool him."

"Good," agreed Jack. "Wish I were going to be here. But, Lloyd, don't forget that school begins Monday, and we must have this suspense over before then. If Père Long thinks there is anything to look for, let's prepare tomorrow and go the next day—Saturday."

"We'll try to do that. I can see myself considering school matters if he thinks that we are on the trail of a worth-while Indian cave."

CHAPTER VIII

Père Long was making preparations to go to town when Lloyd went over to see him. "Will be back early this evening and over at your place by nine o'clock," he promised. As Mrs. Hartnell expected some friends to spend the evening with her, Lloyd went out to the old adobe, removed the débris which had fallen inside from the damaged chimney, dusted everything carefully, and built a cheerful blaze in the hooded fireplace. With two candles lighted and comfortable chairs, it seemed an excellent place to talk.

When Père Long came he first examined the storage vault and its unique contrivances. Then he turned his attention to the map and studied it closely.

"Never have seen anything more interesting!" he exclaimed. "Such originality of representation! And yet one knows instantly what is depicted. Not only are these the peaks back of Santa Barbara, but it is very clear which canyon

he has denoted as possessing a cave and a spring —Indian Canyon. In fact, I remember the spring distinctly. This drawing of it is excellent, even as it exists today. As to the cave, though, 'Cueva de los Indios'—Indian Cave—it must be well hidden. Pity he didn't make a drawing of that, too. However, he has represented it as being below the spring—how far we can't tell, but I do remember seeing some potholes along that part of the stream, and it may be that wind and water together have helped in forming a cave. The canyon cliffs are rugged and deep, and I suppose a rather inaccessible cave might be hidden away there, though the idea seems visionary, doesn't it? And yet, that word 'Indian Canyon'! In some way, in the early days, that canyon must have been linked with the life of the Indians."

"You will help us find it?" Lloyd asked, practically. "You know, college begins Monday. Couldn't we go day after tomorrow. Of course, Jack is in on this, too."

Père Long thought for a moment, then he said: "Yes, but this fact has to be taken into con-

sideration: I have an important business engagement in Santa Barbara—ten o'clock, Saturday morning. Let me see—how could we plan this expedition?" Then later he asked, "How would this do? Let us get an early start Saturday morning and I will take you to what I believe is about the location of the cave; then you and Jack can go ahead with your quest while I return to town. As soon as I can I will rejoin you—probably about twelve o'clock." Père Long chuckled, "Just in time for lunch, you see; but what I really hope is that I shall be in time to help with the discovery."

"That would be great!"

"Now," continued Père Long, "the next question is—could you get your mother to go? I know that Jack's mother has other plans that day."

"I am sure she would go with us."

"Good—our plans are made. By the way, I happen to know the man who owns all that part of Indian Canyon; he would be as interested in this expedition as we are."

Lloyd was silent for a minute and then he said,

"Père Long, let's do this thing right. You get an option on any piece of ground we may desire, so the cave and its contents will belong to us."

Père Long's eyes twinkled. "Quite an unusual business arrangement, but I'll think about it and see what can be done."

"Does the owner care anything about archæology?"

"It's his hobby."

"Then maybe he won't give us the option if he knows what we are looking for."

Père Long chuckled. "I have an idea that he may be so *just* that we will have to protect his interests against robbers like ourselves."

"What a nice little 'knock'," Lloyd grinned ruefully, "and well deserved, too. This treasure-finding business makes one greedy. And, to make matters worse, I have another 'greedy' request—I want you to tell me all you know about these Indians."

Père Long smiled. "I have always thought that if I were an artist I would paint Santa Barbara as it was before the Spaniards came, when it was just an Indian village."

"Paint your picture now and let me in on the preview."

Père Long smiled, hesitated a moment and then said: "Well, we'll make a start, anyway. First, we'll note the general characteristics. It is said the 'higher slopes of the Santa Ynez Mountains were more heavily timbered than they are today'—pines on the upper ridges, live oaks in the valleys, and alders, cottonwoods, willows, sycamores, and rose bushes along the creeks. In spring Santa Barbara's sloping plain must have been green and sprinkled with wild flowers, and late summer brought the tan and mauve and cream tones of sun-burnt grasses. Mountains in the background, and at least some oaks in the middle distance. And we must remember that one of the characteristics of the California live oak is its artistic sense of a suitable setting. Probably these live oaks arranged themselves in attractive groups on the sloping plain, leaving here and there a single specimen, perfectly placed.

"Down near the site of the present courthouse was a large lake, called by Portola, one of the early explorers, La Laguna de la Concepción,

"The Indians lived in large thatched huts"

and near the lake was one of the largest of the rancherias. A rancheria was an Indian village. Each tribe had its own rancheria, and their size varied, from a few homes to as many as one hundred. The coast district of Santa Barbara was thickly settled.

"A suitable location for a rancheria was on slightly elevated ground, with water convenient. Dwellings were conical in shape and were large —sometimes holding as many as fifty individuals. To erect such a dwelling, long poles were driven into the ground and their tops were fastened together. Then this frame was covered with transverse sticks and to these were fastened tule mats or thatch. Finally, earth was banked up slightly about the sides of the dwelling and it was ready for occupancy. When shellfish were eaten, which was practically constantly, the shells were scattered conveniently near and then covered with sand or earth, so that the raised ground on which the rancheria was built continued to rise as a shellmound while the half-buried dwellings had to be raised or rebuilt. But this is becoming a study in sanitation instead of a picture."

"Inside of Indian dwelling"

"It's great!" Lloyd declared. "Please go on."

"Inside of their homes," he continued, "in the center of the floor was a fireplace. Smoke had to escape as best it could through a hole in the apex of the roof, but luckily the cooking was done out-of-doors. Furniture consisted of a couch made of poles and transverse poles covered with rush mats. A rolled rush mat answered for a pillow. Skins served for covering, but sometimes feather blankets were used, made by twisting narrow pieces of bird skin with cords. Household utensils were both numerous and interesting; knives made of flint and obsidian, bone awls for needles, and many other bone and stone tools; different kinds of stone bowls and reed baskets, and some of the baskets were covered inside with bitumen and thus made water-tight. So you see the Indians of Santa Barbara had enough possessions to be cursed with both envy and pride just as we are today."

"I believe it," acceded Lloyd. "I am envious now, and by hook or crook want some of the 'heirlooms,' as Jack calls them."

"As to cooking," continued Père Long, "no

effort was made to simplify it. Mr. Bancroft, a most interesting historian, speaks of grasshoppers as being a 'toothsome Indian delicacy.' They were dried in the sun or mashed into a paste or ground into a fine powder and mixed with mush, or perhaps roasted, with the use of hot stones, in a hole in the ground and eaten like shrimps. The same careful culinary preparation was given to all varieties of insects and worms. Frogs, crows, and coyotes were appreciated, and venison was desired, but the Santa Barbara Indian was a poor hunter. In order to procure a deer he had to place a deer's head and horns on his own head and go forth to battle, at least within bowshot of his prey. *His* prey, should he be successful; sometimes the actual deer proved to be the better fighter of the two. Other delicacies more easily obtained were the islay (a wild cherry or plum), wild blackberries, acorns, and seed for meal, and all kinds of fish and shellfish.

"The fathers at the mission here sent in a report to the Spanish Government in eighteen hundred and twelve. It ran something to this effect: 'The meals of the Indians cannot be counted, be-

cause it may be said for them the entire day is one continuous meal. Even during the night, should they awaken from sleep, they are wont to reach out for something to eat.' Then, later in the report: 'These Indians have no fermented drinks whatever of their own, but they hanker after those of the white people; wherefore we conceal them'."

Lloyd laughed. "A little bootleg would have quickly cured the Indians of that habit."

"Yes," agreed Père Long, "at least it would have left them little time in which to complain."

A few minutes of fun and then Lloyd asked, "Isn't there some theory that these Indians came over from Asia?"

"Yes, they are thought to have come here by way of Bering Strait and the Aleutian Islands. They were probably driven from Asia, either by famine or their enemies, or possibly they had been forced so far to the northeast of Siberia that they found themselves in a region inhospitably cold and crossed over the strait looking for better conditions. However, of course, they were a nomadic people, and in their successive waves of

migration may have been just continuing the nomadic life of their ancestors. It is believed that they slowly worked their way down the western coast, through Alaska and British Columbia, until they reached Santa Barbara, where some of them were ensnared by the climate, fish food, and abundant acorn supply, and settled there permanently.

"At the museum here, the prehistoric peoples of Santa Barbara are classified into three cultural groups. People of the first group were those we have just been talking about. They lived among the oaks back from the sea, had crude metates and rubbing stones, and but little else, and for food depended almost entirely on clams and crushed acorns. People of the Second Cultural Period lived in large thatched huts, twenty-five to forty or more in a hut. But possibly you have seen the interesting clay model of these people at the museum?"

"Yes, but we spent so long looking at other things that we had time for just a glance at that."

"It shows one of their huts on a hillside near the ocean and a lot of busy Indians. Some of them

are shooting birds with bow and arrow; one man is cutting up a sea otter; another pries abalones and mussels from a rock, and a third cleans fish. Children are playing and their mothers are grinding corn in stone mortars and cooking meal by a fire, and near by are some of their baskets and jars, but they are crude and without decoration.

"Next came the Third Cultural Period, and in this the Santa Barbara Indian reached his highest cultural advancement. It closed when the Spaniards arrived, about fifteen hundred and forty-two."

"For what purpose did the Indians use caves?" Lloyd asked. "And why did they decorate a few of them so beautifully?"

"The latter is a difficult question to answer," Père Long told him. "The meaning of decorations like those found in Painted Cave is not known to us. The key of rock sculptures and paintings is usually wanting. The colored pictographs, as they are called, may have had something to do with the early worship of the Indians, or they may have had some historical significance, or they may have been just pictorial utter-

ances, colored drawings of the things represented. We know nothing about them.

"But the Indians must have made some use of the caves," Lloyd reasoned, "for quite a number of their hand-made articles, their artifacts, have been taken from them."

"You are right about that," Père Long affirmed. "You know, the Indians here did not live in caves, but in their dome-shaped dwellings." Then he added quizzically, "Quite a number to each dome. Naturally there was no room for finery other than that being worn, so each family had a cave in which to keep perishable articles, I suppose—feather robes, grass skirts, feather headdresses, possibly skins of various kinds when not in use, and so on—anything they valued and wanted to keep safe."

"We really might find something worth while then?"

"You might," answered Père Long, "but the most valuable 'finds' so far have come from the Indian burial grounds, so don't let your hopes rise too high. Fortunately, the Chumash Indians buried their dead, and they also included their

possessions and sometimes a canoe for them to use in the next life. An early account tells us that they had cemeteries for men and others for women, and that on each grave was a high pole, painted in different colors. From the poles on the graves of the men hung their hair, while from the poles on the graves of the women swung wicker baskets. These graves have been particularly rich in archæological remains, but little has been found in caves. Then, too, you must remember that it has been a hundred years or more since any of these caves were used by the Indians, and so far as I know there was no secrecy as to the location of them—in fact, I believe that in many of them there was a design painted on one wall, a pointer of some kind or the figure of an Indian, done in colors, pointing to the treasured articles, which were placed well back in the cave for protection against rain and wind.

"These caves were practically never entered by anyone except those who had a right to do so. This rule was seldom if ever violated. If there was thieving, it took some other form. But after the first colonists came the Indians lost this high

"On each grave was a high pole painted in different colors"

sense of honor in regard to the sacredness of each family's storehouse. It became necessary for them to take their possessions from the caves, probably to secure them from the thievery of their own people as much as to protect themselves from the dishonesty of some of the incoming whites. Also, of course, as they built better homes for themselves under the direction of the Spaniards, though these homes were mere adobe huts, each family found it more convenient as well as safer to keep all finery near at hand."

"That isn't very encouraging," Lloyd agreed.

"Then, too," Père Long added, "there is one very definite reason why one is not likely to come across a big 'find' in any Indian cave: when the white man arrived the æsthetic ideal of the Indian underwent a change. Before this time, painstakingly, the Indian artisans had worked to form their interesting and beautiful personal ornaments, their feather and fur robes, their ceremonial articles and cleverly decorated household utensils and woven baskets. Things that we value highly today, because of their artistic worth. Suddenly, on the arrival of the white man, these

beautiful things became to the Indians of no value. They ceased even to make them, bartering their homes, food, clothes, even their souls, for the gin and the seventeenth century glass beads of the strangers. So, if the cave is found, Lloyd, and is one used by the Indians of this early colonization period, you must be prepared to find there, highly treasured, a fair quantity of well-preserved gin bottles and a few glass beads."

Lloyd laughed. "How encouraging you are! But think of the elaborate pointer we should find on the wall. A nice lot of gin bottles might have moved any Indian to artistic effort."

"True, and I realize also that there is a very *slight* possibility that Pedro Ponce found an *old* cave, one long forgotten, stocked with the finery of a family lucky enough not to have come in contact with their so-called superiors. But don't forget that—at least as far as I know—little has been found in the Indian caves here other than some simple artifacts and in a very few cases some strikingly beautiful decorations."

"But Pedro might have stored something there himself," Lloyd suggested.

"Might have," returned Père Long, "but it is not likely that he would have stored things of much value there, when he had such an excellent storage vault here, convenient to passing boats, should he wish to dispose of his goods to captains of vessels who had only one object in view—to make a good bargain.

"I was talking to a man this summer who knew more about the history of this old adobe than I had ever heard before. He told me that the day before Pedro Ponce was shot he sold a great quantity of small articles of various kinds to a captain of a vessel who brought his boat in as near to this shore as possible. Pedro met him in a small boat and the exchange of money and goods was made. The vessel was later overhauled by the authorities, who suspected Pedro, the goods examined and found to be jewelry and missing articles from many Santa Barbara homes. A search was made for Pedro, who had disappeared. He was found down near Los Angeles somewhere and in a shooting affray that followed he was killed. He had evidently sold all of his ill-gotten loot, had the money from his recent

transaction on him and was heading for a location more favorable to his unpopular line of business.

"My guess is that he never used the cave as a storage room and had no idea of ever using it as a refuge; if so, he would have kept its location in his memory only. No, I believe the man who drew that map was artistic; somewhat of a dreamer in spite of his lack of moral quality. He could have made a much less elaborate drawing if he had merely wanted it as a memorandum. He was evidently strongly impressed either with the beauty or interest of this cave, and who knows but he may have left this legacy to him who would have the cleverness to find it and make use of it."

"Hope you are right," returned Lloyd. "I don't intend to disappoint him, do you? If we don't find the cave on Saturday, I'm going to play 'hooky' from school until it is found."

So Père Long and Lloyd spent the evening, and as they talked two men crouched at the windows, straining their ears to catch what was being said, especially the name of the canyon, but Père Long had mentioned it twice before their arrival

and did not do so afterward; nor had they been early enough to catch the description of the spring.

Since the passage of the Volstead Law, all along the coast line of the United States, liquor is now and then smuggled in, and points a few miles from Santa Barbara have not been exempt. As Père Long arrived at the old adobe two bootleggers were walking up and down the beach not far from "The Oaks": Pete, swarthy, medium in height and build, gimlet-eyed and disagreeably vigorous in his movements, his manner of talking and gesticulating, and even the way in which he was snappily biting at an apple as though he were afraid it might snap back; Steve, taller, heavier, not so dark, not apparently aggressive, for his natural physical strength had protected him and made him lazy, indifferent, deliberate, willing to take a chance if the risk was slight and it spelled human comfort—otherwise unwilling, with no thought as to the honesty or justice of the act. A coarse face and one expressive of his weakness of character, for his confused ideals had long

ago stunted him both socially and morally. He worshiped independence (so he thought), therefore he became a bootlegger. Also, he thought he had a high sense of loyalty (in reality he liked to domineer), so he became Pete's guardian, and the latter's lack of caution and periodic sprees often involved them in serious difficulties.

When these men had received the signal they were waiting for—that the cargo which they were expecting would be delivered about one o'clock—they started back along the beach in the direction of Santa Barbara. As they neared "The Oaks" they saw a light in the window of the old adobe.

"Never saw a light in there before," Pete said. "It's been boarded up for a month or more. Guess I'll go over and see what's up."

"Fool," said Steve, "always pryin' into something that's none of your business and gettin' into trouble."

"But the place has been boarded up and the people away," persisted Pete. "That's sort of a dim light in there—may be someone takin' somethin'."

"And if so, let him alone—is my advice to you. With our sweet record we can't afford to get into trouble of *no* kind."

But Pete's curiosity had to be satisfied, so he sneaked up to the old adobe and listened. Then he hurried back to Steve, explained what he had heard, and the two of them returned and tensely followed the rest of Père Long's and Lloyd's conversation.

"We'll get the map," Steve said to Pete, as Père Long and Lloyd left. "We *might* make something of the —— thing, and beat them to it."

CHAPTER IX

At ten o'clock the next morning the adventurers began making preparations for their next day's outing.

"I will collect everything except food," Père Long affirmed. "You and Jack can capture that wherever you can find it." So the two went foraging.

"I am a much better thief than a cook!" Jack exclaimed, while robbing her mother's cookie jar.

"In modern times," Lloyd explained, "food is not cooked, it grows on shelves. I am going to pluck a can of beans and a jar of peaches." Other things were also "plucked," and then they went to Père Long's, then to Lloyd's, growing more daring as they continued their explorations. But when they returned to Père Long, with two baskets piled high, he said that nothing less than a train of camels could transport up the trail all they had "acquired." After much dis-

cussion a compromise was effected, Lloyd declaring, however, that he would probably be too weak from starvation to make the return trip. Then Pére Long hurried over to his own home to do some writing and left Jack and Lloyd to store the bundles and baskets in Lloyd's garage.

"Jack," Lloyd said, when they had everything placed where it would be safe and could be easily thrown into his car the next morning, "your mother and mine are off having a gay time; let's go to town ourselves and have some fun. We can have lunch at El Paseo and then spend the afternoon together."

"Surely will," agreed Jack. "I am due at a friend's home at four o'clock, but we'll have several hours before then." And she ran over to her own home to dress in a light-blue sports costume which she remembered Lloyd particularly liked.

Lloyd thought that El Paseo might be crowded, so he 'phoned and had a table reserved, and by twelve-thirty he and Jack were seated at it, glad to rest after their busy morning.

"Jack!" Lloyd exclaimed after they were

"The street in Spain"

seated, "right in line with my line of vision is another 'vision'—black satin, a touch of red, snappy black eyes, evidently Spanish — don't mind, do you, if I flirt?"

"Not in the slightest," Jack answered. "I'll be too busy to notice you," and Lloyd found Jack laughing lightly and contagiously at him, with her eyes on a good-looking young college student who, it appeared, was not at all interested in his lunch.

But weaving itself in and out of their banter and frivolous conversation was a keen awareness of the gorgeous beauty and gayety of this little Spanish court, hidden away from the Street in Spain by two narrow, twisting passageways and a few descending steps. On three sides of the court were overhanging balconies with jutting roofs of red tile and railings from which hung several richly colored Spanish shawls. These balconies were reached by a stairway at one end of the court running up close to that wall, a green vine growing on white adobe paralleling its line of ascent. At the other end of the court were three gracefully arched doorways leading to an

enclosed part of the "sala," a quaint, artistic place called the "refectory," built and furnished like the austere eating-rooms of the old missions; and in the center of the court, where all could enjoy it, was a tiled fountain with potted plants at its four corners, and grasses and lilies projecting themselves from its sparkling surface. Hanging baskets of flowers and flowers on each small table also flaunted their colors, and in one's ears was the plaintive cadence of old Spanish songs being played by a Spanish orchestra, for Santa Barbara was coming back with renewed life from the trying days of the big temblor.

When they were through they went up to the Santa Barbara State College, which occupies one of the most beautiful sites in Santa Barbara, and sat on one of the benches of the vine-covered pergola and talked of the fun they would have there the following year. They faced a central court, where slender light-tinted eucalyptus trees curved and hung high over a blue-tiled pool and blossoming shrubbery half hid the surrounding vine-covered corridors. Now and then they turned and looked down over the city and out

across the ocean to the Channel Islands and beyond as far as eye could reach.

"When we finish at this college," Lloyd finally said, "we ought to have a postgraduate course at one of the larger universities."

"You are dreaming," Jack told him. "We'll never be able to afford that. Not unless we find a fortune tomorrow!" she added, laughing.

"We are going to," Lloyd assured her; "just watch us!"

At four o'clock Lloyd left Jack at her friend's home and returned to the business district of the city. He wanted to examine some Indian curios which he had seen in a window as he and Jack had walked through the Street in Spain, on their way to El Paseo. He parked on State Street, and as he got out he ran his hand down in one of his coat pockets—the roll of deerskin was there. That morning, before leaving home, he had found himself uneasy about the Indian cave map, which he had placed in the secret drawer of his desk. He could not shake off this feeling, so just before starting he and Jack had gone to the old adobe and he had taken the roll of deerskin from

the drawer. Then, not being able to get it into one of his inside pockets, he had placed it deep down in one of the wide pockets of his coat. As he did so, he little realized that he was being watched by someone who had been unable to find the map in the old adobe and felt chagrined as well as angry when he saw Lloyd come out of there with the deerskin roll in his hands. And though Lloyd felt less uneasy to have the map with him, several times through the afternoon he had made certain it was safe in his pocket.

In order to reach the curio shop Lloyd decided to pass through a long, narrow, tunnel-like arcade leading directly to the old De la Guerra home and the Street in Spain. A very interesting arcade with potted plants banked on narrow, long tables on one side and one-room shops opening on the other, and in the windows and through the doors of these tiny shops could be caught glimpses of most alluring things from beautiful flowers and "rare editions" to "Ming dogs" and live canaries. A strang place, too, a little dark and mysterious, for it is lighted as a rule only by the soft artificial radiance which shines out

through the open doors and windows of the small stores.

Lloyd found several people there enjoying this unique flower-filled arcade. He walked slowly—looking with interest about him. But, just when he seemed to be pretty well hemmed in, a man tried to squeeze past him, and at the same time he felt the man's hand in his pocket. Lloyd seized the thief's wrist and, with a flash of thankfulness for camp life, wrestling tricks, and strength, he bent it slowly backwards in such a manner that he could not get around to strike him. But a stranger was watching them and Jack felt afraid that in another moment there would be a scene. The map was safe, sticking half way out of his pocket, so he risked letting up a little on his grasp. The man wrenched his wrist loose and slunk away toward the Street in Spain.

Lloyd turned and hastily retraced his steps, got in his car, and started for Montecito. Already he had a plan: if this thief was determined to have the map he would get Père Long to help him, and they would make a fake map placing the cave up Rattlesnake instead of Indian Can-

yon. Then, if the thief stole that, possibly he would be kept busy until he and Jack could have a chance to explore. Who the man was, of course, he had not the slightest idea; but evidently he had overheard enough of some conversation to convince him that his efforts would be worth while—but he had known that the map was in that particular pocket. Lloyd frowned — the man must have been near the old adobe when he and Jack were there in the morning. Lloyd did not like the idea of Jack being in any danger, and if there was much more of this, she might be.

He parked his car in front of Père Long's house and walked through the yard. Luckily Père Long was in and met him at the door.

"A man tried to steal the map from me," Lloyd explained. "But before we talk about it, let's watch from the front and rear windows to see if he has followed me." So Lloyd went to the rear of the house and watched from there while Père Long took his stand at one of the front windows. Soon the latter spied a man making his way down the other side of Mariposa Lane, as far as possible hiding behind the low stone wall of the opposite

estate. Père Long whistled softly and Lloyd came hurriedly.

"Never realized before," he explained, "that I have too many trees in my front yard, but watch that opening which gives a good view of the road." Lloyd did so and soon saw some one pass —swiftly—as though he were afraid he might be seen.

"Think he is going to approach the house by coming up behind the hedge," Père Long continued. "There is one point where the hedge is thin—keep your eyes on that." This time, too, they saw some one quickly pass, just a shadow-like form behind the four-foot hedge.

"That will bring him within twenty feet of the front porch," Pére Long whispered, and, standing well back in the room, where it was dark, they watched through another curtained window so see if he would risk coming out from behind the hedge—possibly with some idea of spying on them, perhaps through a window—but the man made no further movement; at least they did not see him again.

"He may be waiting to have another tussle

with me," Lloyd whispered, "but I rather think he is waiting in the hopes of overhearing a porch conference. Let's plan a good one for him; save us the trouble of making a fake map for him to steal, for that was my idea. Instead of giving him a map that will make him think the cave is on Rattlesnake Canyon, let's persuade him by word of mouth to go there and look for it."

"Good idea," agreed Père Long, and hurriedly they went over the points they wished to make plain to this attentive follower. Especially they hoped to convince him that they would go Sunday instead of Saturday. Then they stepped out on the porch.

Père Long held the map in his hand. "You see, Lloyd," he said, pointing to the map, "if this line is compared with that one, it places the cave about a mile and a half up Rattlesnake Canyon. That will be a short hike and we shall have lots of time left to look for the cave, and I believe we shall have no trouble finding it. Too bad we can't get off Saturday, but business engagements will hold me all day. However, we *will* go Sunday and try to get an early start, too."

"All right," Lloyd agreed, taking the map, "I'll tell Jack that we are going Sunday. In the meantime, I think I have pretty well persuaded that thief that we can take care of ourselves and that he had better forget our plans and attend to his own business."

"Probably so, but be cautious. We don't need the map, now that we know the cave is up Rattlesnake Canyon, but we don't want it stolen!"

"I'll take care of it," Lloyd called back, and he wondered if the man would be satisfied with the information they had given him or make another attempt to get the map.

A little later Père Long went over to "The Oaks" and had a long talk with Lloyd. Then Lloyd went over to explain everything to Jack. When he was through giving her an account of his and Père Long's afternoon experiences, Jack asked: "How about your mother? Isn't she worried to have burglars 'snooping' about?"

"No, she is really a good scout; but Père Long bothers me a little; insists that we take Scott Dwight with us; says it will take two men, working together with a rope, to scale some of those

cliffs—which it won't. But also says that he feels responsible for you and mother, and he will feel better about leaving us up there if I have someone to help me in case of trouble."

"Would rather have Scott along than anyone else," Jack told him, "but we'll do more laughing than climbing if *he* is with us."

"Of course Scott would be fun," Lloyd agreed, "but I can't imagine that it will be necessary to have anyone."

"Oh, well," Jack argued, "Père Long has done a lot for us, and I suppose we must have some consideration for his wishes."

"Guess you are right." So later Lloyd drove over to Scott's home and they talked until late going over every detail of the Indian cave affair.

"Will I give up a fishing trip to go?" Scott finally exclaimed. "I'll be with you tomorrow if I have to carry a cannon under one arm and a machine gun under the other."

Then Lloyd made what speed he could back home, for his sleeping hours would be few.

CHAPTER X

THE NEXT MORNING the adventurers started before sunrise for Santa Barbara, where they were to pick up Scott and then continue their way over the curving, well-paved roads of the foothills to the mouth of Indian Canyon, from which point they would hike up the canyon trail to a spring which Père Long believed to be the one designated by Pedro Ponce.

They passed through the business district of Santa Barbara. There were still evidences of the recent disaster. But one year from then the city would be celebrating its Spanish Fiesta and proudly exhibiting its new beauties. Then the buildings would be more uniformly Mediterranean in character and low, only a few over three stories, and most of these and many of the lower ones would be built with a steel frame—a safe construction against temblors. Also there would be hardly a store of any size not backed up by a patio, where one might rest and sense the fra-

grance of blossoms, watch the play of a fountain, or enjoy the graceful, delicate uplift and drooping beauty of palms and other tropical trees. Clean and white, with telling bits of color and infinite charm, and "more earthquake-proof than any other city on the coast," Père Long would be boasting.

Then Scott was picked up and they turned and began to mount the hills which lie to the north. When they reached the upper heights they were spellbound by the early morning scene. Over the ocean were flame-colored cirrus clouds on a background of purple and apple green; eastward the curved shore of the Rincon was backed up by purple mountains, the intervening bay being iridescent with the colors of the sky; westward and far below the little town seemed unwilling to awaken and was still clinging to wisps of its mysterious night-dusk, but some fringing lakes had caught the spirit of the morning and were as gay in color as the scene above them. Such vividness of tones, however, could not linger long. Greens disappeared, purples became lavender, more warmth crept in everywhere, while two vessels,

imposing bits of black on a rose and lavender sea, approached the miniature wharf of the toy village.

Then the road over which they were driving twisted in broad curves behind a hill. Time was precious, but the adventurers waited until the sun had gouged out a part of the ocean and a bit of Rincon Point and fired the little town with enthusiasm for another of its many beautiful days.

"Some send-off!" Jack said breathlessly. "Guess it means good luck."

"Getting up early is good luck of itself," Père Long said sententiously, and in a few minutes they reached the mouth of the canyon.

A narrow rocky trail led up the canyon, bordered with chaparral and ferns and wild flowers and twisted old oaks which had found a precarious foothold on the steep mountainside, some of their heavy limbs arching low over the path. Here and there glades opened out from the trail —open spaces covered with a carpet of dried grass and tan leaves and decorated with boulders which were lichen and moss covered and as varied in coloring as a shadow at sunset.

At times the trail climbed high above the narrow gorge which the stream had hollowed out for itself, for the most part out of the solid rock, then again it climbed down to it, a few times crossing over, either to climb again or to ramble through some shady, cool, tree-covered passage-way which would follow upward the now dry bed—dry, except that in a few places a trickle of water flowed from some crevice, only to disappear quickly beneath the pebbles and sand or under some boulder—a rock-bound boulder-filled stream-bed, telling of Titanic struggles there in flood season.

Now and then, above and beyond the chaparral-covered mountain sides, one could catch a glimpse of highly colored rugged peaks. Mrs. Hartnell indicated the peaks. "They don't look as though they had been laid down under the sea, do they? But I do feel that they might begin to slide at any moment."

Père Long chuckled. "I have never felt inclined to distrust them but once—that was on the famous twenty-ninth of June. But they soon looked permanent again."

The Santa Ynez Mountains extend for sixty miles or more—from the Ventura River, which is east of Santa Barbara, to a little beyond Point Conception, which is west of it. They present to Santa Barbara bold, serrate, bare peaks of sandstone and a few sentinel-like pines on their topmost ridges, stragglers from the more wooded northern side. La Cumbre Peak, the highest, is a little less than four thousand feet. Indian Canyon is typical of the many steep canyons which cut into the range at right angles, draining its precipitate sides. The rock strata of the Santa Ynez have been pressed upward from their horizontal positions until they are almost vertical, their worn and sometimes ragged ends forming to a great extent the sides and ridges and peaks of the mountains; and chaparral begins on the flanks of the foothills and climbs the mountains, following upward the dry strata of sandstones and shales.

Mottled mountains they are. Back of Santa Barbara the hills are naturally terraced and covered with wild oats, while the valley beyond the first ridge is dotted with oaks; higher, the moun-

tain sides are chaparral-covered, with bare peaks above; while west of the city orange and lemon and walnut groves, lima bean fields, and various other crops make interesting designs which cut up into the shrubbery of the foothills, and east of the city are the fine estates of Montecito, which are more and more adding to the diversified coloring of the lower slopes.

Mrs. Hartnell had been studying the chaparral. "How interesting all this growth is, but I recognize practically nothing."

"It is our 'Elfin Forest'," Père Long explained. "Of course there are other 'Elfin Forests' in different parts of the world—ones of acacia in the East and of eucalyptus trees in Australia, and so on—but ours, which extends over a great part of the mountainous district of Southern California and Old Mexico, and even into Nevada and Arizona, is one of the finest and I think far more consistently dwarf than any other."

"Does poor soil and lack of moisture keep the trees from growing as they otherwise would?"

"Yes, and many of them grow with very little

soil; a crack in a rock sometimes seems to be a substitute, and this growth has to be made during the three or four winter months while we have our rainy season. The other eight or nine months they have to stand around and wait for another drink. Surprising that there is such an army of good-natured trees."

Jack mopped her brow. "I knew there was something a-matter with me," she said. "I feel exactly as though I hadn't had a drink since the last rainy season. The next time we pass over that river bed, if there is a trickle of water anywhere about, I am going to get my mouth right into it, and the whole cavalcade can wait until I am through."

Père Long smiled. "Thank these dwarfs for any water you may find. Were they not so persistent about covering the mountains, you would go thirsty. They hold the water in their roots and in the ground, preventing it from running off too quickly."

"They certainly are interesting," Mrs. Hartnell agreed; "but whether I shall ever learn to distinguish them is a different matter."

"It is a little difficult," Père Long conceded. "There are about one hundred and fifty different species, but about twenty of them form nine-tenths of all the growth, so, if one learns to know the twenty, it is quite sufficient to feel well acquainted with them. In fact, there are fewer than that of great importance, and if you are interested your knowledge of the chaparral will grow quickly."

Finally they came to the spring indicated on the map. There had not been a great deal of change there in the last hundred years or more, because the spring was in the bed of the stream, the water trickled out from a crevice and fell from the top of a mass of solid rock onto the solid rock below, where it had gradually cut a circular pool. From there, for a short distance, it trickled over the uneven, rocky stream-bed and then disappeared again beneath sand and pebbles. Being surrounded by hard bedrock, the spring had cut its course more deeply but preserved its main characteristics, and anyone could recognize it from the painstaking drawing made by Pedro Ponce.

The party looked about them. The sides of the canyon towered up above them probably one hundred and fifty feet, widening out of course at the top, but uneven, with great masses of obtruding rock. From one hundred and fifty feet or so above, the slopes were more gradual to the summits of these two spurs which cut into the range at right angles. Lloyd was delighted. Nowhere, probably, in the Santa Ynez Mountains could one find more difficult climbing than this. But his day in which to do it seemed to dwindle away into nothingness, and tomorrow school would open.

"What are your plans?" asked Père Long.

"Begin at the spring and work down," answered Lloyd, "first on one side for a short distance and then on the other. Glad we brought that rope. And I think we'd better work together, don't you, Scott? Might need each other's assistance."

"Undoubtedly," Scott replied. "If I am going to swing around some of those rocks I shall certainly want *some one* to hold my hand."

"Never mind, Scott," laughed Jack, "I shall pick you up and put you tenderly away."

"Jack," admonished Mrs. Hartnell, "another thought like that, and you will have to lead me 'tenderly' back home."

"But, seriously," said Lloyd, when they were through enjoying an absurd pantomime, given by Scott, of some of his future climbing experiences, "don't you think our plan a good one, Père Long?"

"Excellent," he answered. "The only part I don't like about it is having to turn my back on all this hard work and fun. But, as you know, I have that business engagement at ten o'clock, and I'm not certain that I wish you success in the meantime. Would surely like to be 'in for the finish'."

Scott looked about him and drawled: "Judging by the picturesque protuberances on every hand, you needn't hurry yourself in the slightest. I'm thinking of asking for a year's leave of absence from college, for exploration purposes."

"Needless to do so," Jack advised him. "They are probably thinking of giving you a year's leave of absence without your asking for it."

"Now, Jack," Scott returned, "you are in

practically every one of my classes, and should they ever give me an enforced leave of absence, I will see that they provide a nice little vacation for you as well."

"I would suggest," said Père Long, "that, if any work is to be done today, Scott and Jack should be separated."

"Just what I was thinking," agreed Lloyd, and taking his rope he lassoed Scott and dragged him off up the nearest cliff.

Père Long took out his watch. "We made good time this morning; it's now eight o'clock. It will take me a little over an hour to go down the trail and a half an hour by machine to the city. I don't contemplate any trouble up here, or I would not leave. Both of those boys know how to climb, and Jack can stand guard and give them warning if she spies any unpleasant visitors, but I think that would-be thief is over on Rattlesnake Canyon." A little later he left, and Mrs. Hartnell and Jack began to arrange their camp near the spring.

CHAPTER XI

As THE BOYS climbed, they more and more realized the difficulties which would be encountered. The solid rock of the canyon sides was exposed in many places; great rugged masses, the broken ends of upturned strata, nearly all of it water-worn and sometimes more worn at its base than above, leaving crags jutting out over space. From above these ragged ends of strata, in cracks and crevices and over every part of the sides of the canyon (except where the solid bare rock gave them no purchase), ferns were growing, bits of chaparral and even live oak trees, their heavy branches sprawling low over the rough surface. It was a bewildering, impressive sight—a struggle of the native growth against the bedrock for purchase, rock against trees and shrubs, wild flowers and ferns, lichens and mosses.

Sometimes the boys climbed tree trunks and often far out on branches to gain some rocky ledge. At other times they found it almost im-

possible to make their way through some heavy growth of shrubbery, bordered on each side by unscalable, almost perpendicular, rocks. However, in two hours they had covered quite a little ground, but without success. Judging from the drawing, the distance from the spring to the cave should not be great so they returned to explore one point which they had deliberately passed up, in the hope that they would in a short time find the cave elsewhere.

The location to which they returned was before a perpendicular cliff of rock. About midway of this cliff, near its top, was an apparent break in the rock's surface, a shadow which appeared to be an opening; but as it could be seen only from a few points, far below, the boys were doubtful as to its nature. Finally, as there seemed to be no other way to reach this apparent opening, Lloyd and Scott decided to tie their rope around some small rock or tree above the cliff and each in turn let himself down hand over hand, with a chance that he might be able to swing into the cave, should it prove to be one. They realized, though, that if either of them should fail to find

a purchase there, and had to continue on down the rope to the ground below, it would probably mean burned or torn hands, if not a fall.

Jack was dressed in a sweater, "knickers," and hiking boots, and had been doing quite a little exploring herself—sometimes with the boys—then again alone. Now they explained to her what they were about to hazard, and asked her if she would stand guard while they were climbing, as they would not be able to see down the canyon from that point. Lloyd did not contemplate any trouble, but he felt responsible both for Jack and his mother.

"Whistle once, Jack," Lloyd advised, "if you see anyone coming; twice, if you think he is a suspicious looking character. We'll forgive you if you misjudge the poor soul."

"And should you see a young and beautiful maiden," Scott admonished, "whistle about five times." But before he could continue Jack was after him with her hiking stick.

Up until this time Jack had not feared for the boys' safety, but now she felt that they were going to be needlessly reckless. Suppose the opening

should prove to be only a deep and dangerous crevice, in which no footing could be obtained! "Wait until Père Long comes," she urged them, but they merely laughed at her and tried to joke her out of her fears for them. However, they did not succeed, and later Jack found herself watching their efforts far more than the down trail.

In the meantime Lloyd's mother was resting and reading and enjoying the beauty of her surroundings—the clear pool of water, the trickling stream, and the impressive sweep of rock and chaparral which towered up about her. She no longer worried when Lloyd was climbing or boating or swimming; he had been doing these things for so many years. Also she knew that he would let Jack risk nothing, so she rested, feeling sure of the happiness of the day, never dreaming of what was actually ahead.

The boys went some distance farther up the trail, and then worked their way gradually back along the side of the canyon to a position above the perpendicular cliff of rock. When they reached this point Jack could not see them, but she knew they were busy finding safe anchorage

for the rope. When one of the boys did finally appear she was too horrified to do more than gasp. She had not realized how insignificant and helpless they would look, dangling and struggling, nearly one hundred and fifty feet above her level.

First Lloyd came over the top, rapidly lowering himself hand over hand along the rope and at the same time trying to hold himself away from the face of the rock with his feet. When the opening was reached she saw him push himself outward from the top and then swing in, lowering himself on the rope at the same time, but he was still too high to gain a footing on the ledge. He swung out again, lowering himself again on the rope. Jack realized the terrible strain on his arms. He should not have attempted it. When he swung back he did not have enough momentum to enter the cave, the floor of which seemed to be deep in the rock, and she watched him struggle to gain a foothold so he could pull himself over to it. He gave up presently and again pushed off, and she knew that, if he did not succeed this time in swinging in far enough to gain a purchase, he might fall.

To her horror, once more he stopped short of a safe position; again he struggled, but he could just touch his toes to the ledge. Agonizing minutes of suspense passed, then he secured the foothold he was fighting to gain and quickly pulled himself over to the ledge and sank down too exhausted to move. But Jack still feared for him; he was so frightfully near the edge. Then he was up again, and calling to Scott in a strained, lifeless, weak voice: "Don't try it, Scott! Too dangerous, and there's not much room here."

But the rope moved and Lloyd knew that Scott had started. Again he called: "Don't try it, Scott! You'll get us both into trouble if you do!" But Scott was not to be deterred, and almost immediately appeared over the top. A moment later Lloyd called to him, "Good work! You'll make it." But his words were merely to encourage. He knew that both of them faced a desperate struggle and that, as he was far more active and stronger than Scott, and had just been able to save himself, Scott's safety would depend on the amount of help he would be able to give him.

Scott held himself from the face of the rock, as

Lloyd had, with his feet. Then Jack saw him swing into the mouth of the cave, too high to gain a purchase. She watched Lloyd struggle to keep Scott from swinging back, But Lloyd's feet began to slip and he kept himself from going over the edge only by throwing himself down and grasping some rock projection there. Scott swung out and then back again, but not far enough in to gain a footing. Lloyd reached out and gradually drew him in, so slowly that it seemed hours to Jack, and even after Scott was in he seemed unable to balance himself, and she saw Lloyd supporting him until he could recover.

Then Lloyd called to Jack, "Everything's fine now, and the rest will be easy." He knew how harrowing their struggles had been for her. He had not supposed the cave would be so hard to enter; they should not have attempted to climb down into it as they had, merely by holding to a rope. When Scott rallied, Lloyd said to him: "We ought to have got Jack out of the way before we tried a fool climb like that. Nice for her to see us kicking around like a couple of helpless spiders."

"You're right," Scott agreed. "We were blockheads. Jack," he called, "this is a great old roost up here, and sliding down the rope is going to be a joy ride."

But Jack would answer neither of them. She was furiously angry with them. Angry that they had broken her "nerve." She found herself cold and trembling. Her face was covered with sweat and she was crying "They are fools, fools, fools!" as though they were her most bitter enemies. Then the whole thing struck her as ridiculous and she began to laugh, but she soon restrained herself and gained some measure of composure. However, she was quite sure that nothing less than a tragedy would ever make her forgive Lloyd and Scott, and she wasn't anxious for a tragedy, not on top of all she'd been through. Besides, she didn't want to forgive them. What she wanted to do was to get even. And she would, too, and soon! At least no one would ever know that she had cried. "Cried over the boys!" What a horrible thought! How miserably mortifying! For a few minutes she felt that she could, with perfect calmness, see either or both of them fall

from the cave to the rocks below. Should they give her another chance, she'd show them whether or not her "nerve" could be broken. From now on the human race could do what it pleased—or didn't please. Everybody had to die, anyway—what was the use of making such a fuss about it?

From below, the boys appeared to be in the cave, but as a matter of fact they were not. Very recently, probably the year before, during the big quake, a massive piece of rock had fallen from the roof of the cave, just at its entrance. Most of this rock had fallen down the precipice to the rock pile below, but a part of it had fallen in the mouth of the cave, making a barrier about four feet high to its entrance.

Wind and rain and repeated shakes had left a narrow ledge more or less clear and on this ledge the boys had found a footing.

From above the cave, up, there was a distinct bulge outward in the rock, leaving the mouth of the cave shadowed and much farther under the projecting rock than the boys had supposed it to be. The fact that it was partly

closed with rubble could not be observed from the ground below. The ledge which the boys gained after such intense exertion was not over a foot wide in places and all of it somewhat littered with stone, so it had been necessary for Lloyd to hold on to Scott until he could rest and feel less faint and giddy. Now they were both on their feet, and, as they had done all they could to assure Jack, they were anxious to continue their work. But they had just started to crawl over this rubble when there came clearly and distinctly two whistles from below.

Lloyd had at no time during the last half hour of excitement either lost his "nerve," been confused, or excited. Now he was trembling.

"Scott," he said, "Jack is in trouble or she would not have done that."

"Think so, too. Wish I hadn't come down."

"Nonsense," returned Lloyd, always loyal to his friends. "Look, Scott, look hard right in the rear of the cave. That is a dim patch of daylight, if I am not mistaken."

Scott stared intently into the black cave. "Believe you're right. I hadn't noticed it."

"Listen, Scott! There's no time to be lost. It was stupid of us to forget that flashlight. I'm going to make my way in there to that point of light. It may be an opening into the cave which we overlooked. If so, it will probably be easier to try to get out that way than to slide down the rope. Suppose you noticed the rope didn't quite reach—a drop of about thirty feet to a rock pile?"

"Yes."

"More than it looked from above."

By this time Lloyd had started. "Don't come until I call you," he advised.

"I won't."

"Easy work!" Lloyd exclaimed, as soon as his eyes became adjusted to the dim light of the cave, and then, as he reached a crevice-like entrance at its rear, "Scott!" he called, "come on! It seems to be a tunnel that leads out, pretty well littered with rock, but I believe I can clear it as we crawl through. If so, we'll be out of here in a few minutes." He turned and looked back at Scott. His

eyes were now accustomed to the dim light of the cave. Every part of it stood out distinctly. He gasped, and then realized that it was no time for such considerations.

"Glance back when you reach here," he called to Scott, and then began frantically to clear the small tunnel of rocks, so they could squeeze their way through on their hands and knees. He kept an almost steady stream of rocks sailing straight ahead down the tunnel until they had made their way out. The only exclamation he heard from Scott was "Great Chepu!" and he knew that he had looked back into the cave.

Then they were out and scrambling and tumbling, jumping and sliding down the mountain side, any way to reach Jack quickly.

The cave had been formed, no one knows how long ago, by a mountain rivulet, just a run-off from the ridge above. This water had found a crevice along the lower edge of a block of sandstone which had already cracked loose from the solid rock of the mountain side. At first, only a trickle of water had seeped its way through this

tiny crevice, but as it became enlarged more and and more water had poured through until a large cavern or tunnel was formed—about twenty feet long and ten feet wide, with curved sides and a maximum height of six feet. Dry, of course, except during the seasons of rain, when the rivulet would enter one side of the rock, flow swiftly through the tunnel and come out on its other side, with a hurried plunge of a hundred feet or more down into the canyon. And this resulted in the stream's wearing back slightly the mouth of the tunnel where its waters curved over and abruptly descended the rock face of the perpendicular precipice.

Then a landslide or rockslide occurred, perhaps caused by an earthquake, too far back for one to know when. Rocks filled in the bed of the stream above the tunnel and the rivulet had to find a new entrance to the larger stream, some distance up the canyon. All of the upper entrance to the cavern was now closed except a small crevice on its down-stream side, but even this was almost entirely roofed over with rock, so the tunnel, so long in the making, became per-

manently dry. No water entered it even during the rainy seasons, except now and then rain drove in at its mouth, but this was little, owing to its projecting roof. It had become a cave. Bats and birds sought its shelter, and through the tiny crevice at its rear furry little beings whisked in and out, glad to own so delightful a home even temporarily. In fact, the cave proved to be such a desirable residence that battles were sometimes fought there, often resulting in former tenants being ousted. And gradually the small crevice at the rear became enlarged, not only by the constant exits and entrances of the cave's population, but also by a little water which seeped through from above and helped to dislodge some badly cracked rock.

Then one day a new specimen of being came to the cave. He had no fur except some he wore around his waist, but this stretched part way down his legs. Nor did he have feathers, except a few which graced his head, but he was as gay with colors as any bird which had ever entered. Kneeling, he worked his way through the long crevice, enlarging it when necessary, by knock-

ing away loose rock. From below he had seen the opening in the face of the perpendicular cliff and was in hopes that this crevice-like tunnel might lead to a cave. He was rewarded. He found just what he wanted—a spacious sandstone cave, exposed to the early morning sunlight, dry and worn smooth by the action of wind and sand and pebbles. Probably he looked upward—we have all been doing it ages upon ages. He did not see a sandstone roof; he saw there an expression of his faith. This cave would be his temple, a place to be loved and beautified.

CHAPTER XII

When Jack realized that, at least for the time being, the boys were safe, she immediately lost herself in a reverie of iron-bound determination never again to be perturbed. Never again should any calamity, no matter how great, sap her courage. If things went wrong—she might grieve, in a dignified, calm manner, but fear would be unknown to her.

Just then a twig snapped not ten feet away.

Jack looked up quickly to find two men near her. More vicious looking characters she thought she had never seen, and they were coming straight up the trail; a few more steps and they would have an unobstructed view of the bald face of the rock cliff, of the rope dangling from above, and of the boys themselves on the ledge, if they had not yet entered the cave.

Immediately across from her was a side trail, leading off from the main one toward the bed of the stream. She gave two sharp whistles and

sprang across the main trail and darted down this path in the hopes that the men would follow her. For a short distance the trail was bordered on either side with high, thick underbrush. Fifty yards down it she stopped and listened to see if the men were coming. The path was crooked and they had almost reached her before she was aware of their approach, for they were making as little noise as possible. Well, if that was to be their game, she would play it, too—apparently be unaware of their presence. This time she traveled more slowly, breaking off a twig now and then or plucking one of the late summer flowers.

But the trail quickly divided, one path leading upstream to Mrs. Hartnell and their camp; the other leading downstream, where it evidently crossed the dry bed and mounted higher and higher along that side of the canyon.

Jack had not been over the latter trail, but she knew that from it the men would probably be unable to catch even a glimpse of the boys should they try to make the difficult rope descent from the cave. Choosing the downstream trail she wondered to herself what Lloyd and Scott had

done when they heard her signal. Whether they had been uneasy and would try to climb down too hurriedly from the cave—and perhaps fall. Imaginatively she could see them making a desperate effort, as they had before, to cling to the hard-swaying, slippery rope—and that drop to the rock pile below!

Turning her head very slightly, she glimpsed one of the men through some shrubbery. Now they seemed too near, she must put more distance between herself and them. Presently, when she could find a place more or less cleared from the path to the stream-bed, she would dart down it, and make her way back as best she could to Mrs. Hartnell. By that time the boys would be down from the cave and they would certainly be a match for these two bleary-eyed drinking beasts should they try to follow her or give trouble.

Jack began to watch for a good place to climb or slide down to the stream-bed, but the trail continued to cut its way through a jungle of live oaks and shrubbery, past boulders and dangerous cliffs, ever mounting higher and higher, until she realized that if she should wait much longer an at-

tempt to reach the bed of the stream might end disastrously.

Then she came to a place where a huge boulder had become dislodged from the path and had rolled and slid down the mountain side, gouging out dirt, trees, loose rock, and carrying a vast amount of rubble with it. There it lay in the stream-bed, far below, surrounded by the débris which it had brought down. Jack looked critically at the incline before her—very steep, protruding rocks, stumps, broken branches, and plowed-up earth. The earth would certainly slide with her and to some extent bury her, but anything seemed preferable to retracing her steps and meeting those ugly looking ruffians face to face on the narrow path.

But possibly she was mistaken in her estimate of the men. If she could see them again, she might change her mind; she looked carefully down the trail but could see no one. Then she faced about, put her hands to her mouth and whistled twice as she had before, only softly, as though she were near those whom she warned or called. Then she turned suddenly and glanced

down the trail. One man was crossing it and saw that she had seen him. Now they both came forward, leering, and grinning.

It was Pete and Steve—at their worst. Steve, red in the face and angry over the unusual exertion, and Pete, strongly resembling some of his prehistoric ancestors, with a balance in favor of early man. Indeed, Pete looked like the genuine villain, who is no longer thought to exist. His heavy jaws appeared to be made in sections, each section being securely tied in. His long teeth were exposed by the curve of his upper lip, and his under lip bulged forwaıd prominently. His nose, which had been broken and took an abrupt downward course, was a bright pink, and his shelving, bony eyebrows gave a sinister look to his inflamed eyes. His hair made one feel that he must be a throwback from the days when man was fairly well covered with something closely resembling fur, and he slouched forward heavily like a surly beast.

Had this been Pete's accustomed appearance, he would have been intermittently kept in jail—as a suspect—if for no other reason. But on this

occasion he was looking unusually brutish, due to a sleepless night and about a pint of his own bootleg. One of his features, however, had recently been of unusual service to him—his nose—his latest photographs having been taken previous to its becoming broken!

Pete and Steve had spent the evening before in Rattlesnake Canyon, looking for the cave. Then they had rolled up in blankets and spent the night there. Pete had been cold and taken more liquor than he could *reasonably* carry, and his ill humor had been sharpened in the morning when an accomplice had informed them that Lloyd and his party were over in Indian Canyon. The accomplice had then returned to Santa Barbara and Pete and Steve had retraced their steps, driven over to Indian Canyon, and hiked up that.

Jack gazed at the men intently for a moment and then began to slide. Several rocks which she had not observed before now appeared in too rapid succession to be avoided. The smaller ones she slid or rolled entirely over, but one large one stopped her flight with such suddenness that she was dazed for a moment and bewildered.

Then she became fully aware of the seriousness of the situation. Cautiously she released herself and again began to slide, only to be caught a few seconds later by the broken end of a tree limb which badly scratched and cut her and tore her clothing. Fortunately, however, she missed the huge boulder at the foot of the incline and landed in a mass of dirt and small stones.

For a moment she could hardly believe that she had actually stopped sliding and rolling. Then she felt afraid to try to get to her feet, afraid that this might prove a physical impossibility. Yet she realized the necessity for haste, for she feared the men might try to block her way back to the others. So after a moment of dazed rest she struggled up, noticing as she did so that she was badly scratched and cut and that blood was flowing from a long cut over one shoulder. She was thankful, though, that she could walk, and in a few minutes she was making her way as fast as she could over boulders and through the less dense underbrush.

On the trail above her Pete and Steve waited until they saw Jack get up and begin to make her

way upstream; then Pete turned suddenly and began to run back down the trail. Steve followed him, knowing that in Pete's liquor-crazed mind there was some idea that he could force Jack to show them the cave. This Steve knew was an idea worthy of Pete's condition, but Pete had been getting more and more wild all the morning, and Steve realized that nothing he could say would now restrain him. So he just followed him, determined to do the best he could when a critical moment should come, and come it would, he knew, for Jack's sharp whistling would certainly bring some one, but he hoped not armed men.

When Lloyd and Scott reached the point where they had left Jack and found she was not there, they ran up the side trail to their camp, where they found Mrs. Hartnell, but she knew nothing of Jack's whereabouts.

"I'll go upstream," said Scott, "and you go down." For just a few yards beyond where they had left Jack the upstream trail became heavily wooded.

"And don't make too much noise—at least at first," Lloyd returned. "I'm afraid there's been foul play; I don't believe Jack would have whistled twice and then leave unless forced to do so."

"I don't either," Scott agreed, and then they hurried off. Mrs. Hartnell hesitated, not knowing just what to do, and then followed Lloyd.

Lloyd ran back down the side trail, but when he reached the point where it cut into the cross-trail he hesitated, not knowing whether to return to the main trail to the right, which they had come up that morning—the one on which they had left Jack—or take the cross-trail to the left and follow it down along that side of the canyon. As he hesitated he heard some one coming down the trail to the left. He soon determined that it was not Jack and stepped behind a dense growth of bushes—but whoever it was also hesitated.

Then Lloyd heard some one coming up the stream-bed, and, as he could see in that direction without greatly exposing himself, he looked out. It was Jack, but Jack as Lloyd had never seen her before. While he was recovering from his astonishment, Pete suddenly stepped out into the trail

and, barring her way, said: "Not so fast, little lady; we want to ask yer somethin'."

Lloyd stepped forward. Every muscle was tense. He wanted to kill the man, but he was trying to control himself.

But this was just what Pete had been looking for all the morning—a fight! His sprees always ended in a fight. He gave one bound toward Lloyd and the two of them clinched.

Never could Pete fight so well as when drunk, and today he was at his best. Try as he would, though Lloyd was no novice at this game, he could not gain the advantage he had won the day before in the arcade. Jack's safety, his mother's —everything depended upon his exhausting efforts to succeed. When he finally realized that they were evenly paired and success doubtful, he gasped "Run, Jack, run!" but she stood there horrified until Steve stepped out from behind a boulder. Then Jack picked up a stick. Just what she was going to try to do with it she did not know, but she was not going to leave Lloyd!

She had called Scott several times. Now she called him again. Every minute she expected

Steve to take Pete's part, but he remained there motionless, behind Pete, sizing up the fight, one hand resting near a suspicious bulge in his hip pocket. Then, just as Jack had given up hope, Scott stepped out from behind the same rock Steve had. He took one careful step nearer Steve and, snatching the pistol from his pocket, he ordered, "Hands up!" At the same moment Lloyd succeeded in planting a clean-cut right to Pete's jaw and sent him down and out. Cursing Pete and everybody else, Steve put up his hands. Then the boys went through the men's clothing, but found no other weapons. Pete seldom carried a pistol, knowing he would use it on the slightest provocation.

"Looks like they had given you a run for your life," Scott said to Jack.

"No," Jack answered. "But they followed me, and I saw that they had been drinking, so I slid down a mountain side (Jack smiled) rather than turn back and shake hands with them."

"Good thing she did," Lloyd said, breathing hard. "This one barred her way just as I reached here."

By this time Pete was sitting up on the ground, holding his head and groaning.

"But no doubt they've had enough," Lloyd suggested to Scott. "What do you say to letting them go? We can turn in a good description of them, and an account of what happened up here, and if they give any further trouble the police will be on their trail."

"Suits me," agreed Scott, "and remember," he warned the men, "we have this pistol and we won't hesitate to use it."

"You'll never see us again," Steve declared. "I'm sick of this damn place. Even my partner's getting crazy—like the rest of you cave-huntin' fools." And with an angry jerk he landed Pete on his feet and started him off down the trail.

Their tension broke, the victors laughed.

In the meantime Mrs. Hartnell had arrived on the scene.

"Jack," she asked, "how about it? Feel able to walk back to camp?"

"Sure do."

"Darn shame," Scott growled; "all our fault, too!"

Lloyd said nothing, but he took a handkerchief from his pocket and laid it over the cut on Jack's shoulder and, holding it there, took her arm.

"I'm going to find the first-aid kit," Mrs. Hartnell explained, "and have everything laid out when the rest of you arrive."

"Good idea," said Scott, and he joined her.

Lloyd walked silently beside Jack and she breathed a sigh of relief. That was one good thing about Lloyd—he always knew just what to do. His quiet, assured manner, as though nothing unusual had happened, helped to brace her and made her feel certain of her continued composure. But just before they reached their camp he said, "Jack, I was a fool to leave you, but this is no time to ask for forgiveness, and you shouldn't try to talk now, either."

"There's nothing to forgive," Jack replied, as they joined the others.

"Mother," Lloyd said, "I don't think Jack should try to explain anything until she has been patched up and had a chance to rest, do you?"

"I certainly don't. Moreover, I am a good

doctor and a better surgeon, so you boys settle down somewhere near and rest until lunch time, and I'll see to Jack."

"Hope this won't spoil the day for you," Lloyd called back.

"Trust me. I'll be as good as new in thirty minutes."

A little later, while everyone was resting, Père Long arrived—breathless, red in the face, wet with perspiration. Near the main road on his way up the trail he had met Steve and Pete. Pete was still holding his jaw, still complaining, and his nose was bleeding; if possible, he must have looked worse than he had before. Steve walked behind him and there was nothing compromising in his facial expression.

Père Long had eyed the two keenly, and as soon as he had rounded the first bend he commenced running and continued to run until he reached camp, fearful that the men had given trouble.

Everybody gathered around him, and, needless to say, there was more or less clashing of conversation until all explanations were made—

even to the fact that a cave, undoubtedly *the* cave, had been found and that it had a rear entrance, through which one could crawl.

CHAPTER XIII

A LITTLE LATER Père Long made a confession, that down town he had been sought out by the owner of the cave, who had begged that he and a friend of his (an archæologist, interested in piecing together the scant history of some of the West Coast Indians) might join the "cave hunters" about two o'clock, to see their progress.

"He has been so splendid to us," continued Père Long, "that I could not refuse him, but his next request was that if any artifacts should be found before their arrival they might be disturbed as little as possible until his friend could have an opportunity to examine them in the positions in which they were found. I feel particularly sorry to tell you this," continued Père Long, "because I have done nothing to help find the cave, and am now trying to dictate as to what you shall do with its contents."

"But you have helped," declared Lloyd. "You led us straight to it."

"And we are as interested as anyone in having the contents of the cave explained, aren't we?" Mrs. Hartnell asked.

"You're right," Jack answered.

"Of course," Lloyd added.

"No one has a higher regard for the treasured articles of the past than I," Scott informed them, in his most fastidious manner, "but I don't expect to touch anything until it has been thoroughly disinfected."

Later the boys left and began scouring the canyon side, looking for an easy route to the cave. This proved more difficult than they had supposed, considering the speed with which they had come down, but at last they finished marking out a rough trail and returned for the others.

Mrs. Hartnell was glad to receive assistance up the steeper parts of the newly formed path, and Lloyd wanted to assist Jack, but now that she was regaining her former assurance she would accept little help. Why should she receive help? Neither of those boys could have "catapulted" down the mountain side with the ease and grace she had. Pity those bleary-eyed drunks hadn't

been able to appreciate her swan dives—her toe and knee and head dances!

When they arrived at the entrance to the cave, Lloyd made sure it was safe and still unobstructed, and then suggested that, as Jack was the heroine of the eventful day, she should take the flash-light (which Père Long had brought back with him from Santa Barbara) and be the first to enter and really see what the cave was like. Everyone urged the same, but Jack looked upon the plan with trepidation. A peep into her own home, she thought, would be a much more delightful and comforting experience.

"If you want to please me," Jack returned, "let me go last, after all the rest of you have explored it and called back your assurances that it is not only safe, but comfortable and beautiful."

This was a new Jack. Scott opened his eyes wide and blinked at her. "Have you any color scheme in mind?" he asked seriously. "Also, would you prefer a davenport or a chaise longue?"

"A chaise longue," Jack assured him, yawning luxuriously.

But Lloyd, seeing that Jack was in earnest, grabbed Père Long, who was sitting before the entrance to the cave, and, before he could resist, stuck his head into the opening and followed him up in order to keep him going.

Mrs. Hartnell made Scott go next, and she followed.

Jack waited until the others were well in and she could hear their exclamations:

"Pictures!"

"Marvelous!"

"Ugh!"

"Ooo-oo-oo!"

"Skin!"

"Bone!"

"Feathers!"

"A skeleton!"

"Ouch!"

"Ooo-oo-oo!"

Jack entered quickly, before the rest of her "nerve" should leave.

But all the time she was crawling through the passageway there was a continual serenade of "Ughs-Ohs-Ees-Ows!" until the cave seemed

"They were held speechless at the importance of their find"

to be filled with a mob of grunting, excited, agitated savages, instead of a few would-be archæologists.

"Come straight forward to the middle of the cave and then go toward the light where Scott is working," Lloyd directed Jack. "The things in the rear of the cave are *queer*. Back there you might disturb the rest of some old Indian medicine man, and you know you *would* be 'done for' then!"

"Ugh!" exclaimed Jack. "Anybody who wants it can have my share in this cave."

"Have never seen anything so beautiful," Père Long affirmed, while sitting on his heels and gazing up at the ceiling.

Scott had brought their pick in with him and was fast removing the débris at the wide mouth of the cave.

Except to examine things closely, Lloyd felt that the flashlight was more of a hindrance than an aid, so he snapped it off. For a moment there was a little surprised protest, but as their eyes became adjusted to the dim but rapidly increasing light (due to Scott's success with the pick) they

were held speechless, trying to size up in a general way the extent and importance of their find: a ceiling marvelously decorated with designs in blue, white, and red; the center of the floor space clear, but along each side wall interesting looking vessels and baskets, and toward the rear the "queer thing" Lloyd had spoken of. No one knew just what was there—a junk heap, quite uninviting looking. The exploring party had unintentionally come in contact with its nearer edges and had loudly expressed their disgust.

But the baskets and steatite vessels soon captured the attention of all, and they proceeded to peep and peer into them, with fingers itching. "How can we find out what is in these things if we can't touch them?" Lloyd asked.

"The men are down there," Père Long answered. "After lunch I was standing on the trail watching you boys form the path up here when I spied them coming up the trail. I told them they were much too early and not to join us until you had explored your cave. If you wish, I can call to them and they will be here in three minutes."

"Three minutes is the limit," Scott affirmed. "Over that and their cause is lost."

"Right," added Lloyd.

So Père Long went to the mouth of the cave and called to the men and directed them how to follow the trail up to the entrance of the cave.

"Let's take in the ceiling while we're waiting," Jack suggested.

Père Long turned around and said enthusiastically: "Those are the most beautiful and elaborate Indian decorations I have ever seen."

The ceiling decorations or pictographs differed not greatly from those of the Painted Cave, near San Marcos Pass, but covered a greater expanse of surface, and though soft in tone, were yet clear cut, not having been greatly worn off by the elements, rubbed off by sightseers, or tampered with by over-zealous artists.

"Those look like cart wheels," Jack declared, "but I suppose they are suns. See! They are scattered everywhere throughout the other designs." The spokes and rim of each wheel were of the natural-colored sandstone, outlined with red, and the rim's outer edge of red had a final

outside edge of blue. To the center the spokes were defined by spaces of blue. A glorified cart wheel, but certainly not a cart wheel to the early Indian or Indians who painstakingly, with various mineral deposits found in the vicinity, rubbed the colors, clearly and distinctly, with clean-cut lines, well into the soft stone.

"You are right," affirmed Père Long, "they are symbolic figures of the sun or moon. See! Here are circles and circles within circles, all having radiations from the center, but also bearing the added decoration of a star-tipped border. Some of the circles have as many as twenty points." Red and white pigments had been used for these astral figures, with just an outline mark of blue here and there.

"The sun, moon, and stars!" exclaimed Scott. "I couldn't do that well myself, but of course I've had several years of high school art, and that's enough to deaden anybody's artistic sense."

"What's that?" asked Lloyd, pointing to a rather elaborate figure.

"The same figure is found in Painted Cave," Père Long informed him, "scattered through the

other designs, just as it is here. Most of their designs are used again and again. That figure is supposed to represent an Indian."

"Thought so," returned Lloyd, "and it's cleverly done, too!" The feet and body of the Indian were represented by what appeared to be a fine pair of slender scissors done in red, edged with white. The rounded handles of the scissors formed his feet; the slender closed blades ran up to his head, forming a very erect spinal column. Out from this straight, vertical body, stretched at right angles, one over the other, ovals of red and blue—four blue and three red on each side—the red and blue ovals alternating. This was doubtless an Indian blanket drawn evenly and closely about the small but majestic figure. For, though his face was white, his head was erect and four plumes graced his crown.

"Valiant deeds the originals of these small figures must have accomplished!" Mrs. Hartnell exclaimed with enthusiasm.

"Yes," agreed Père Long. "Long may their plumes wave!—in spite of visiting tourists."

But there were other designs—crosses, very

much like some of our crosses today, thousand-legged worms, strange animal-like forms, and at least one god. His head was a tall red vase, slightly out-flaring toward the top; his body a much taller red pyramid, slightly blunted at the apex. From the base of this red pyramid, red line-like arms curved upward, with hands and fingers outstretched — but nowhere could one find limbs or feet!

"But what of it?" loyally exclaimed Père Long. "Who would deign to walk?"

"Besides," added Scott (with his usual "airs" of the connoisseur), "he is nicely finished off with a short red fringe."

In a few caves and on some boulders, in the Santa Ynez Mountains, are found these puzzling, strangely beautiful pageants, mystic symbols of another race. One can but guess at their significance and hope for a further clue.

True to his word, in three minutes Père Long was standing at the outside entrance to the tunnel greeting his friends.

Mr. Forbes was possibly between sixty and sixty-five years of age. A quiet, dignified, gentle

person. One could hardly believe that he was a nationally known figure in the business world and had weathered the stress and heated debate and recriminations of many financial storms. Slight but not frail in appearance, he had delicate but forceful features and eyes which were very expressive of the quality of the man; kind, thoughtful eyes, quiet yet observant, deliberate —as though, in spite of the pressing demands of big business, they had never been disturbed by the startling limitations of time. And to some extent this must have been true, for he had found time and spirit to play with several hobbies, art and archæology ranking high.

Mr. Rankin was tall and just a little angular, and he exhibited something of the significant simplicity and natural ruggedness of the fields and hills which were his usual working ground. Those who knew him socially felt that he was a little lacking in enthusiasm, detached, but in the open he was galvanized into something quite different. One felt his quiet intensity, as though he had the power by mere volition to conjure into the ground the objects he found there, perhaps

only crude tools, but "revealing efforts of a race well worth study." For a while, with suppressed excitement and alert concern, he would work with these dirt-encrusted articles of the past. Then, possibly, he would become lost in thought —when he would absent-mindedly grind a bit of dirt between his thumb and forefinger—or did he find inspiration from its particles?

Anyway, this day he was interested and alert. Père Long smiled, and felt an added glow of enthusiasm himself. He had never before seen this noted scientist "under fire." Then he brought them through the passageway into the cave, where the others had remained.

"Now," said Père Long, "introductions first, the cave afterwards." When these formalities were over, the two men began to enthuse over the boys' find.

"Better than Painted Cave," declared Mr. Forbes, examining the pictographs; "more of them, better preserved, and a few new designs."

"And to think that the cave has been undiscovered all these years!" said Mr. Rankin. "Pity we didn't do more climbing and less digging."

"Without this map and Père Long," Lloyd explained, "we would have found nothing," and he opened up the map for the men to see. They were so interested in it and spent so long studying it that Père Long finally said: "Now, look here, you two—you have an excited and impatient crowd on your hands. If you don't immediately satisfy our curiosity there is a possibility that your work may be done for you, with more speed than science."

"Forgive us," said Mr. Forbes; "we forgot entirely our obligations. Rankin, suppose you get to work."

"Take this map," Mr. Rankin said to Lloyd. "If I see it again, it will be to your loss. Suppose we start over there," he continued, "at the wide mouth of the cave and examine all the receptacles on that side; then come over here and examine these; then very slowly and carefully look over the confused heap of things back there. Fortunately, the treasure is massed around the sides and to the rear of the cave, so we can sit in the center and look about."

"Well planned," said Père Long, "and ex-

plain things as you go along. Remember, we are as interested as you are."

Mr. Rankin moved over to the basket nearest to the mouth of the cave and glanced around at some of the other baskets. "This basket," he said, "and some of the others were made before the Spaniards came—probably long before; they seem quite ancient. Believe Pedro Ponce found them here when he found the cave. The rest of the baskets are more recent and exhibit the finest Chumash workmanship, especially that bottle-neck basket," and he pointed to a gray basket, circular, about eight inches in diameter, rather low and slightly smaller at the base than at the top. It had a flat top and a small circular mouth in the center of it, and about this mouth was a rim which extended about an inch above the flat top. The whole basket—bottom, sides, flat top, and rim of mouth—was decorated with encircling bands of buff and gray, and on the gray bands were elaborate geometric designs in tones of buff, tan, and brown. "This bottle-neck basket," he continued, "was probably used for gifts or offerings." He took it up and shook it, and then

turned it upside down on the floor of the cave. To everyone's astonishment, a quantity of small charm stones fell from it.

The temptation was too great, everyone grabbed.

"I have a whale," exclaimed Jack. "Anybody would recognize it." And it was true. The tiny light-colored, highly polished stone was distinctly a whale, even to an eye and a blowhole in the top of his head.

"Made of white shale," explained Mr. Rankin, "and so artistically done. 'It catches the spirit of the original without being too slavish an imitation'."

"What are these?" asked Lloyd, picking out three or four hooked stones.

"They were probably brought over here by Pedro Ponce or some of the Indians from the islands. They represent birds and are not usually found on the mainland."

"Of course," Lloyd exclaimed. "Long-billed and short-billed ones."

"And these," Mr. Rankin continued, picking up a few strange animal- and fish-like forms with

a hole pierced in each, "were worn by warriors. During some big dance, this stone, for instance, jumped at some warrior. After that he wore it on a cord around his neck, for he knew that with its aid, should he ever be hard pressed, he could become invisible. So of the others. The protective amulet of the Indian possessed mysterious powers and magical influence; supernatural qualities, known only to its maker or its owner. But magic was in the air. Prayers to that whale assured a good catch of fish, and no doubt, if properly appealed to, the bird effigies supervised the hunt successfully."

"And to think," exclaimed Père Long, "that Pedro Ponce should have valued all these things at a time when the fathers were trying to get the Indians to forget their 'heathen practices' and others were merely amused or uninterested."

"It is strange," agreed Mr. Rankin, "for this is a museum. I imagine, with the exception of a few very old baskets, which might have been here when Pedro arrived, all the rest of the baskets, the bowls, water jugs, and the olla were brought here by him; not only for their own value, for

they are the finest he could have procured, but as receptacles in which to place all the beautiful and interesting Indian things which he was gradually collecting."

"That olla is a marvel," Jack said, enthusiastically; "look how evenly it has been ground down, and the bowls look much too fine for cooking purposes."

The olla of the Indian was a vessel used for holding liquids or for cooking purposes. It was nearly spherical in form, rather thin-walled and ground smooth within and without, the opening being in the top and often only about one-third that of the maximum diameter of the vessel. This one was about a foot in diameter and made of steatite or soapstone, as they quite often are. It is thought that these steatite ollas were made on the Island of Santa Catalina, also perhaps on the Island of Santa Rosa, and bartered by the natives from the islands, as little steatite has been found in the Santa Ynez Mountains.

The bowls were smaller than the olla, but made very much like it, only with wider mouths and of staurolite, a dark rock with light specks

of color through it. They showed no marks of having been set in a fire and were painstakingly incised and decorated with bird-bone sections, set in, as usual, with asphaltum. Being too fine for common use, they must have been made for ceremonial occasions.

In one of these bowls was found a collection of cigar-shaped charm stones, which are thought to have been appurtenances or properties of the medicine men. All of them were well polished, symmetrical, and made of stones—not only beautiful in their markings, but foreign to the locality in which they were used. The latter is always true of this type of charm stone.

Then a basket was examined. It was filled with Indian money, made of small pieces of shell, perforated, and arranged on strings. Money not only of the Chumash Indians, but also some used by other tribes.

As the Indians could not count, the length of a string and the kind of shells on it determined its value. Some of these strings were of rather large pieces of thick clam shell; other strings were of very small rounded pieces of the "olivella," a

thin shell; others were of long tubular pieces of shell, being the hinges of clam shells. The latter were highly prized, for wampum served not only as money, but was valued for its ornamental effect, as we value beads or a string of pearls today.

Then a collection of whistles was found made of bone and cleverly decorated, and after these a collection of steatite and obsidian pipes. The pipes were tubular in form and were an inch or more in diameter across the bowl, which tapered gradually toward the bottom where a short stem or mouthpiece of bone was set in. Like the whistles, they were beautifully decorated with bird-bone inlays, and some of the sections of bone, no larger than our smallest beads, were cleverly incised—delicate art work to have been done without a magnifying glass.

"These look interesting," Scott exclaimed, and Mr. Rankin took up the bowl he pointed out and dumped it on the floor. It was filled with all kinds of small, primitive implements and household articles which the Indians used before the Spaniards came.

"Look!" exclaimed Mrs. Hartnell. "This is

the last basket, and I believe it is going to be the best." It was filled with Indian jewelry; shell bracelets and shell combs for the hair; a string of white and black stones, alternating—the stones being pierced and highly polished; a string of pearls and a string of stones cut from amethyst crystal. These, too, were pierced. Finally they found a necklace composed of fine bird-bone sections, colored stones, and shells. Its tiny round bird-bone sections, and stones of the same size were nicely engraved, and the front of the necklace was made in graduated sections as ours, today, are often made, with a lavaliere of mother-of-pearl.

"Now," said Mr. Rankin, "we'll look at the things in the rear of the cave. I have saved the best until last."

"Excuse me," returned Mrs. Hartnell, "I'm not going over there; not, at least, until you have laid out the corpse. I saw some of the bones.

Mr. Rankin laughed. "So did I, and I am hoping those bones will prove to be our most valuable find."

"That's all right, but I'll leave their investi-

gation to the rest of you. Only, if you see anything that you don't like, please *don't* scream."

"Don't," added Père Long. "One good scream in this confined cave and we will all visit an ear specialist."

Scott slipped his hand into Jack's and, visibly trembling to prove his agitation, said:

"There is still time for one last good deed—
Help the trembling and the weak-kneed!"

Jack gave him a shove which sent him so nearly into the center of the sacred objects under discussion that everyone screamed, and there was a general clapping of hands to ears, for the noise was deafening.

"If you had injured these art objects," declared Mr. Forbes, "you would have been sacrificed to Chepu immediately!"

"I'm not certain that he won't get you anyway," added Mr. Rankin. "He's a very powerful Indian god, and this is a sacred moment," and he stooped down and pulled gently at one of the protruding bones. Feeling afraid to scream, everyone groaned. But in a moment Mr. Rankin had the bone in his hand and was exhibiting it to

them. "Just as I thought," he said; "it is a human thigh bone made into a flute. It is beautifully decorated with an inlay of abalone shell, has six holes, and probably 'a scale relative to that of the modern flute.' The only other one I have ever seen at all like it is in the Northwestern Museum at Los Angeles. It was unearthed on Catalina Island, with a skeleton now known as the 'Flute Player.' Probably this one, too, came from the islands, for the Chumash Indians of the mainland seem to have specialized in one-hole whistles."

He drew out another bone which was protruding from the heap. It proved to be another flute, almost a duplicate of the one just found. These articles were proving to be worth while. Even Mrs. Hartnell came forward.

The final bone of the supposed skeleton remained to be examined. It was on the floor partly under other things. Mr. Rankin pulled it out. It was the rib of a whale, but one end of it had been rolled about in heated bitumen until a solid mass of the substance had formed on it—a more effective war club could not be imagined. Beside this

club was another. It was made of limestone, about twenty-five inches in length and two and one-half inches in diameter at the larger end, from where it tapered to about one and one-half inches at the smaller end, and here there was a knob to keep the hand from slipping.

"A stone baseball bat," Jack remarked.

Lloyd took one club and Scott the other, and they gave a practical demonstration of the way in which they were formerly used. Soon they were both limping and were quite ready to come to terms.

Near the clubs, off to one side, were some flint and obsidian arrowheads, a spear made of wood with a ten-inch flint head affixed to it, and an old bow. The wood of these articles was nearly gone, but Mr. Rankin seemed to value them highly. And near these was a pile of asphaltum weights, about all that was left of several reed skirts, for one of these small clove-like pieces of asphaltum was always attached to each reed of a skirt. Then there were several incised bone combs which were hollow and had originally held feathers (the head-dress of the Indian), and finally under

these were a few scraps of sealskin and a quantity of small shells—the waste of probably more than one handsome shell-embroidered costume.

"Have you any idea how long ago these things were placed here?" Mrs. Hartnell questioned.

"No," answered Mr. Rankin, "but I do not believe that originally the cave served this purpose. It was probably decorated, long before historical times, for some great and profound use. Why it became later a storage-room for perishable articles, we will never know. One could work up many theories along that line. At last all knowledge of the cave must have been lost, until finally it was rediscovered by Pedro Ponce, who bequeathed it and its contents to him who would be able to catch the significance of his map. You young people have done well."

But to Père Long the young people gave credit for finding the cave.

Then Mr. Forbes looked at his watch. "Three-thirty, and a great deal yet to be done."

"There is," agreed Mr. Rankin, "but, with everyone's permission, I am going over the same ground we have just been over and make notes.

I want a close record of the cave as it was when found and the artifacts here."

"Need help?" Lloyd asked.

"Thanks; be glad if you will."

"It seems crude," Mr. Forbes remarked, "to break into such an interesting experience as you young people have afforded us with a business discussion, but I don't see how we can avoid it. These valuables have to be protected, especially as would-be thieves were on your trail. By the way, did you have any trouble today?"

In a few minutes he was made acquainted with the details leading up to the boys' find: their difficult descent into the mouth of the cave; Jack's encounter with the men; her escape from them down the mountain side; Lloyd's fight; Scott's clever theft of the automatic, and the men's laughable departure.

"Well," exclaimed Mr. Forbes, "that makes the protection of these articles all the more necessary. Those men might return or send others, and these relics might be broken or scattered about in search for treasure of more realizable value.

"For several years," he continued, "I have been looking about for a unique gift for the people of Santa Barbara. Now I feel that I have found it—if you young people are willing to join in with me. This is my bargain: if you will contribute the artifacts found here, I will deed this part of the canyon to the City of Santa Barbara, build a caretaker's house here, and keep this cave open to the public. Also, in appreciation of your splendid work here and what you are enabling me to do, I make you the following offer—but remember, in making it, I do not think of you as strangers; through Long I feel that I know you well, even to your aspirations. Besides, in less than a day's time, you have pretty well proved yourselves.

"This is my offer: some friends and I are planning an archæological expedition. We expect to be ready in about two years. At present we are keeping our objective a secret; but I hope our experiences will prove neither very dangerous nor trying, and the work will be highly interesting. I would like for the three of you to accompany us; and, should you care to consider doing

so, all details will be furnished you. Each of you would be assigned some share in the work; all of your expenses would be paid and you would receive sufficient salary to make you financially independent while you complete your education. Also, Jack would have the tremendous advantage of working with one of the leading women scientists of the United States.

"However, do not feel that there would be anything binding in such an arrangement. Should you accept and find later either that you could not or did not wish to go, you should feel perfectly free to withdraw and I would try to repay you in some other way for enabling me to make this gift to Santa Barbara. But I hope that you *will* accept and will go; for I have faith in all three of you and am glad to be associated in this work with you."

Mr. Forbes's "offer" was so direct and unexpected that dead silence followed his words. Père Long was the first to regain speech.

"Forbes," he said, "I accept for them. They are dazed."

And in a very few minutes there was no doubt

in anyone's mind as to what Jack, Lloyd, and Scott wished to do.

"Come over to see me next Tuesday evening," Mr. Forbes continued, "and we will discuss this more thoroughly." Then he turned to Mrs. Hartnell. "If you say so, I am going to send Mrs. Forbes over to see you."

"Both of you come," Mrs. Hartnell answered, "and I hope these young people will prove, some day, that your interest in them is justified."

As the others were talking, Mr. Forbes lowered his voice and said, "It has been my good fortune to know quite a number of scientists—all fine men. Now I pride myself on being able to pick them out. I'm not afraid that Lloyd will disappoint me. Jack, too, has initiative and enthusiasm, and Scott the humor and good nature which every archæological expedition needs." Then he turned to the others, and more urgent matters. "I am going to leave immediately, and will send a couple of men up here to guard this treasure until it can be properly housed." And in a few minutes all of the men except Lloyd were crawling through the tunnel-like exit.

A moment later, Mrs. Hartnell remembered that she wanted Père Long, who was returning with Mr. Forbes, to send a telephone message for her, and she followed the others out.

Jack and Lloyd were left alone. They would go out later, before Mr. Forbes should leave, but they would have a minute or two together—in *their* cave.

"How's the shoulder?" Lloyd asked.

"Had forgotten all about it."

"Jack, is it to be a lifetime of work together?"

"Whatever happens, Lloyd, I'll be with you. But don't you think we'll probably wake up tomorrow?"

Lloyd laughed. "Perhaps, but I doubt it," he said.

"You mean that we are going to take part in some archæological expedition, and have all expenses paid and money to boot, for the fun of finding interesting things like we have today?"

"Something like that—*if* we're lucky!"

Jack went over to the bottle-neck basket and dumped out some charm stones and selected from them the white shale effigy of a whale and one of

a bird. "We'll keep these, Lloyd, and we'll just have to be lucky."

"Good idea. Even Rankin won't begrudge us these—but Jack, *you* are the best luck I'll ever have."

THE END

J-828

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